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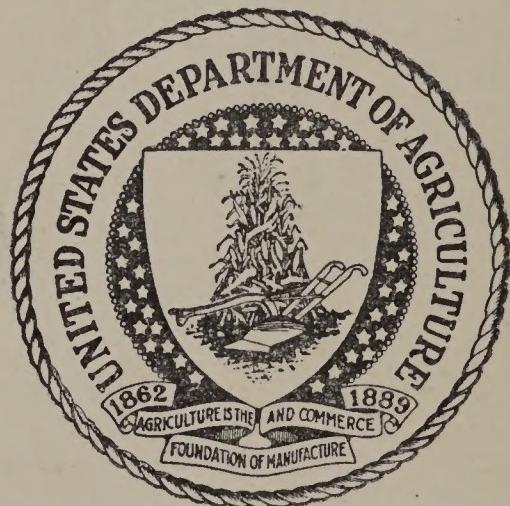
GIFFORD PINCHOT, Forester

THE USE BOOK

REGULATIONS AND INSTRUCTIONS
FOR THE USE OF THE
NATIONAL FOREST RESERVES

1906

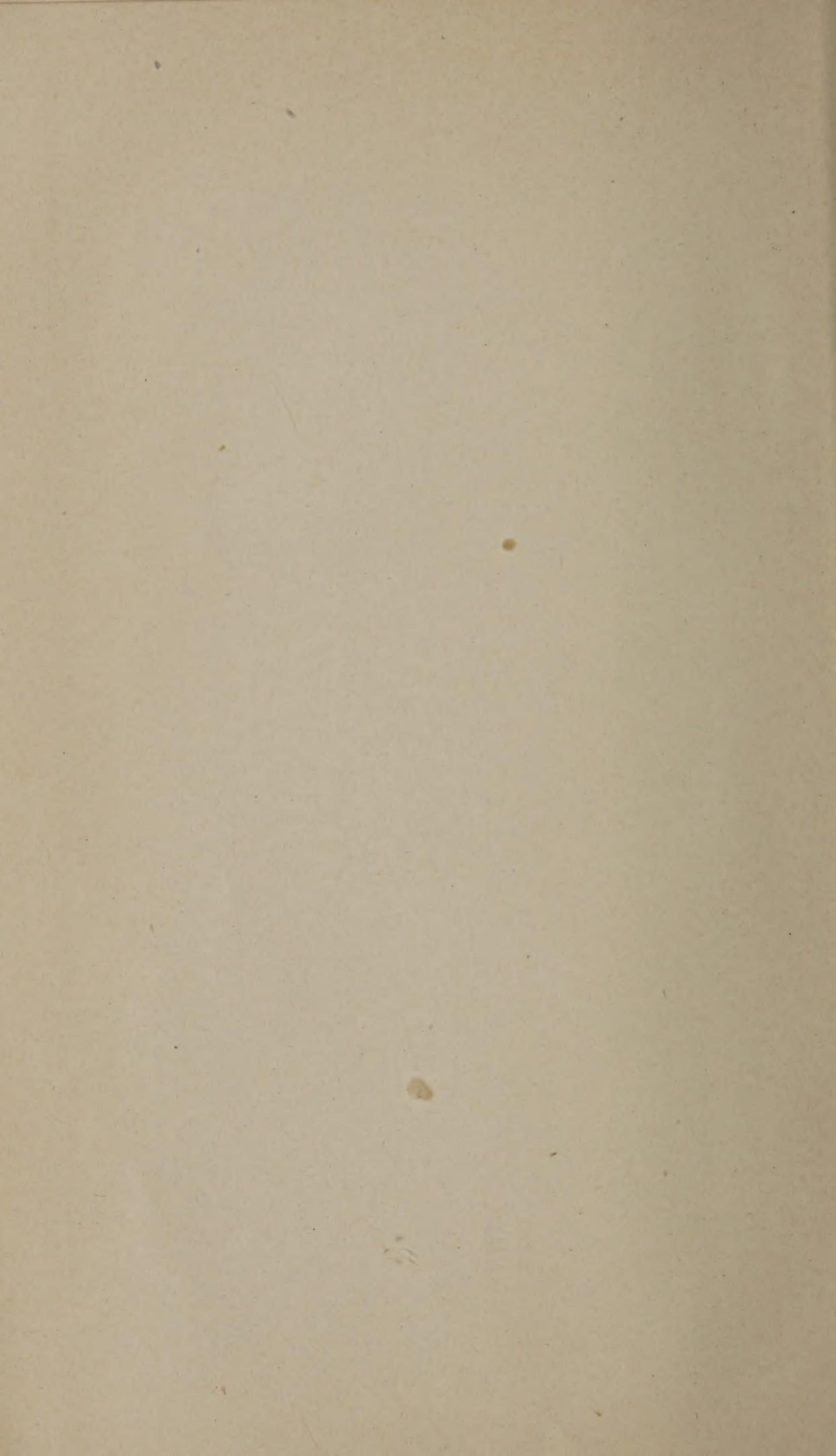
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U. S. DEPARTMENT OF AGRICULTURE,
FOREST SERVICE.

GIFFORD PINCHOT, Forester.

THE USE BOOK

REGULATIONS AND INSTRUCTIONS
FOR THE USE OF THE
NATIONAL FOREST RESERVES.

ISSUED BY THE SECRETARY OF
AGRICULTURE JULY 1, 1906.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1906.



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U. S. DEPARTMENT OF AGRICULTURE,

FOREST SERVICE,

Washington, D. C., June 11, 1906.

SIR: I have the honor to present for your approval a revision of the regulations and instructions for the use of the National forest reserves.

Very respectfully,

GIFFORD PINCHOT,

Forester.

Hon. JAMES WILSON,

Secretary.

U. S. DEPARTMENT OF AGRICULTURE,

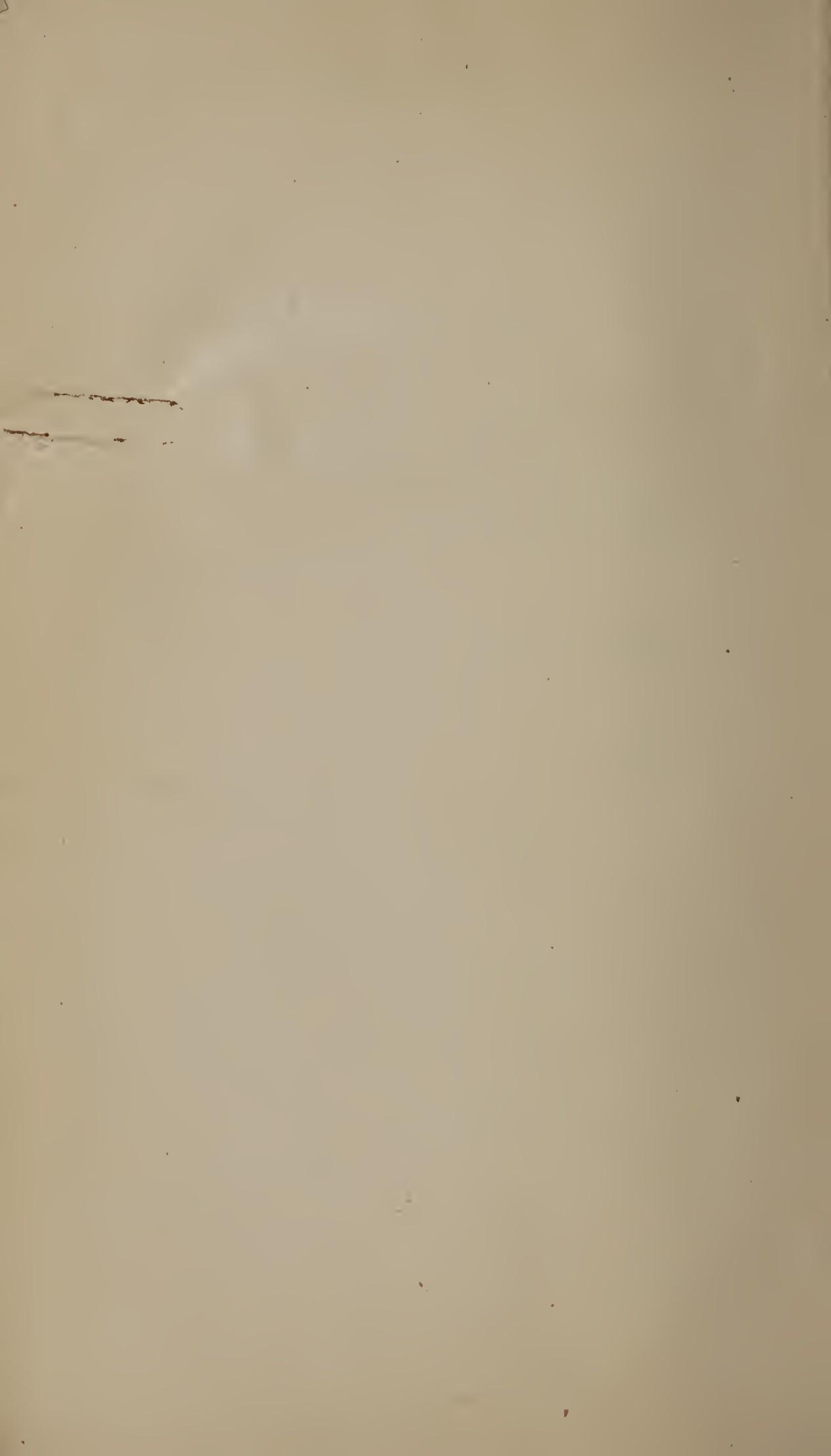
OFFICE OF THE SECRETARY,

Washington, D. C., June 12, 1906.

The accompanying regulations, bearing date June 11, 1906, are, under authority conferred by law upon the Secretary of Agriculture, hereby approved, made, and established to take effect July 1, 1906, and all previous regulations in conflict with them are hereby revoked. The Forester is authorized to issue appropriate instructions for the execution of these regulations and regulations hereafter established.

JAMES WILSON,

Secretary.



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TO THE PUBLIC.

The timber, water, pasture, mineral, and other resources of the forest reserves are for the use of the people. They may be obtained under reasonable conditions without delay. Legitimate improvements and business enterprises are encouraged.

Forest reserves are open to all persons for all lawful purposes.

Persons who wish to make any use of the resources of a forest reserve for which a permit is required should consult the nearest forest officer.

Ten per cent of all receipts from forest reserves are given to the counties in which they lie, to be used for schools and roads.

No one but the Special Fiscal Agent, Forest Service, Washington, D. C., is authorized to receive payments for the use of the forest reserves.

Payments must be in the form of postal or express money orders or national-bank drafts on New York City. Other forms of drafts, checks, certified checks, or postage stamps will not be accepted. (Reg. 7, p. 29.)

Complaints should be made in writing, both to the immediate superior of the officer complained against and to the Forester, at Washington.

Every user of a forest reserve will be held responsible for knowing the regulations and obeying them.

Throughout this book general information and directions are printed in this type.

Regulations are printed in this type.

Special instructions to forest officers are printed in this type.

THE USE BOOK.

HISTORY AND OBJECTS OF FOREST RESERVES.

Forest reserves are for the purpose of preserving a perpetual supply of timber for home industries, preventing destruction of the forest cover which regulates the flow of streams, and protecting local residents from unfair competition in the use of forest and range. They are patrolled and protected at Government expense for the benefit of the community and the home builder.

We know that the welfare of every community is dependent upon a cheap and plentiful supply of timber; that a forest cover is the most effective means of maintaining a regular stream flow for irrigation and other useful purposes, and that the permanence of the livestock industry depends upon the conservative use of the range. The injury to all persons and industries which results from the destruction of forests by fire and careless use is a matter of history in older countries, and has long been the cause of anxiety and loss in the United States. The protection of the forest resources still existing is a matter of urgent local and national importance. This is shown by the exhaustion of lumbering centers, often leaving behind desolation and depression in business; the vast public and private losses through unnecessary forest fires; the increasing

use of lumber per capita by a still more rapidly increasing population; the decrease in the summer flow of streams just as they become indispensable to manufacture or irrigation; and the serious decrease in the carrying capacity of the summer range. It can not be doubted that, as President Roosevelt has said, "the forest problem is in many ways the most vital internal problem of the United States."

As early as 1799 Congress provided for the purchase of timberlands to supply the needs of the Navy, and in 1817 further legislation directed the setting apart of public lands for the same purpose, and provided penalties for the unauthorized cutting of any public timber. Other acts, from time to time, made similar provisions for setting apart forest land for specific purposes, but the first attempt to secure a comprehensive administration of the forests on the public domain was in 1871, by a bill introduced in the Forty-second Congress, which failed of passage.

In 1876, \$2,000 was appropriated to employ a competent man to investigate timber conditions in the United States, and on June 30, 1886, an act was approved creating a Division of Forestry in the Department of Agriculture. On July 1, 1901, this Division became the Bureau of Forestry (now the Forest Service, since the act of March 3, 1905), employing practically all the trained foresters in the United States, and engaged in almost every branch of forest work in every State and Territory except the actual administration of the Government forest lands. This remained in the Department of the Interior, which, although possessing complete machinery for the disposal of lands,

was provided with neither system nor trained men for conservative forest management.

In the meantime, with the increasing realization that the nation's timber supply must be protected, and with the immense growth of irrigation interests in the West, the necessity for retaining permanent Federal control over selected forest areas was recognized by a brief section inserted in the act of March 3, 1891, which authorized the President to establish forest reserves. (Appendix, p. 157.) The first exercise of this power was in the creation of the Yellowstone Park Timber Land Reserve, proclaimed by President Harrison March 30, 1891.

The mere creation of forest reserves, however, without provision for their administration, was both ineffectual and annoying to local interests dependent upon their resources. Consequently the Secretary of the Interior, in 1896, requested the National Academy of Sciences to recommend a National forest policy. This resulted in the passage of the act of June 4, 1897 (Appendix, p. 157), under which, with several subsequent amendments, forest reserves are now administered.

On the theory that the management of land, not of forests, was chiefly involved, this law gave the Secretary of the Interior authority over the reserves and provided that their surveying, mapping, and general classification should be done by the United States Geological Survey and the execution of administrative work by the General Land Office.

But the technical and complex problems arising from the necessary use of forest and range soon demanded

the introduction of scientific methods and a technically trained force, which could not be provided under the existing system. The advice and services of the Bureau of Forestry were found necessary, but, under the law, could be but imperfectly utilized. The necessity of consolidating the various branches of Government forest work became apparent and was urged upon Congress by the President and all the executive officers concerned. Finally, the act of February 1, 1905, transferred to the Secretary of Agriculture entire jurisdiction over the forest reserves, except in matters of surveying and passage of title. (Appendix, p. 161.)

The regulations and instructions for the use of the National forest reserves here published are in accordance with the act last mentioned and the various supplementary and amendatory laws passed since June 4, 1897. They are based upon the following general policy laid down for the Forest Service by the Secretary of Agriculture in his letter to the Forester dated February 1, 1905:

"In the administration of the forest reserves it must be clearly borne in mind that all land is to be devoted to its most productive use for the permanent good of the whole people, and not for the temporary benefit of individuals or companies. All the resources of forest reserves are for *use*, and this use must be brought about in a thoroughly prompt and businesslike manner, under such restrictions only as will insure the permanence of these resources. The vital importance of forest reserves to the great industries of the Western States will be largely increased in the near future by the continued steady advance in settlement and development. The

permanence of the resources of the reserves is therefore indispensable to continued prosperity, and the policy of this Department for their protection and use will invariably be guided by this fact, always bearing in mind that the *conservative use* of these resources in no way conflicts with their permanent value.

"You will see to it that the water, wood, and forage of the reserves are conserved and wisely used for the benefit of the home builder first of all, upon whom depends the best permanent use of lands and resources alike. The continued prosperity of the agricultural, lumbering, mining, and live-stock interests is directly dependent upon a permanent and accessible supply of water, wood, and forage, as well as upon the present and future use of these resources under businesslike regulations, enforced with promptness, effectiveness, and common sense. In the management of each reserve local questions will be decided upon local grounds; the dominant industry will be considered first, but with as little restriction to minor industries as may be possible; sudden changes in industrial conditions will be avoided by gradual adjustment after due notice, and where conflicting interests must be reconciled the question will always be decided from the standpoint of the greatest good of the greatest number in the long run."

RELATION OF FOREST OFFICERS TO THE PUBLIC.

The administration of forest reserves is not for the benefit of the Government, but of the people. The revenue derived from them goes, not into the general fund of the United States, but 10 per cent of it directly

to the counties in which the reserves are situated (Appendix, p. 163), and the other 90 per cent toward maintaining upon the reserves a force of men organized to serve the public interests. This force has two chief duties: To protect the reserves against fire and to assist the people in their use.

Forest officers, therefore, are servants of the people. They must answer all inquiries concerning reserve methods fully and cheerfully, and be at least as prompt and courteous in the conduct of reserve business as they would in private business. They must obey instructions and enforce the regulations for the protection of the reserves without fear or favor, and must not allow personal or temporary interests to weigh against the permanent good of the reserves; but it is no less their duty to encourage and assist legitimate enterprises.

They must make every effort to prevent the misunderstanding and violation of reserve regulations by giving information fully and freely. The object should be to prevent mistakes rather than to have to punish them. Information should be given tactfully, by advice, and not by offensive warnings.

Forest officers will be required to be thoroughly familiar with every part of this book, and to assist the public in making applications for the use of the reserves.

SPECIAL INVESTIGATIONS UPON FOREST RESERVES.

It is the active policy of the Forest Service to manage the forest reserves upon a sound technical, as well as business, basis. Improvement in the standard of the technical management alone can secure steady and

constant increase in returns without depleting the forest. To this end careful investigation is essential. This includes special study of the habits and requirements of trees as a basis for the regulation of cutting of every kind. Special attention will be given to finding new uses for species at present valueless or little used, as well as for the trees already classed as commercial. Studies will be made of damage by fire and the best means of preventing it, and, in cooperation with the Bureau of Entomology, of the prevention and control of insect ravages. In these and in many other ways the basis of knowledge necessary for the best forest work will be laid.

To sum up, the forest reserves will be studied with reference to their best use for every purpose. These studies will not be limited to the present applications for the use of the reserves. They will be aimed at developing wider uses, not merely at meeting the present demand in the most satisfactory way. Whether the work is done under the supervision of inspectors or other officers sent out from Washington or under the technical assistants stationed permanently on the reserves, the local officers will in every case assist and cooperate in the work so far as possible with justice to their regular duties.

All available Government publications of interest will be sent to any member of the Forest Service free of charge on application to the Forester.

PROTECTION OF CITY WATER SUPPLIES.

The Forest Service intends to improve and protect the forest cover of watersheds within forest reserves on which adjacent cities and towns are dependent for

their water supply. If the authorities of any such town have determined by investigation that the decrease of the water supply is caused by overgrazing, excessive cutting, or fire, they are invited to apply to the Forest Service for assistance after consulting with the supervisor.

The supervisor on receipt of requests of this nature will immediately report to the Forester, in detail, covering the following points:

Location and area of the watershed.

Distance from the reserve line of the intake of the city supply.

Description of the forest, including species, density, reproduction, soil, slope, and ground cover.

Definite recommendations as to steps the Forest Service should take to improve or protect the watershed by planting, trail building, extra fire patrol, closing to stock, or prohibiting the sale of timber.

CLAIMS AND RIGHTS.

I. IN GENERAL.

Questions involving title to unperfected valid claims are entirely within the jurisdiction of the Secretary of the Interior. A valid claim is defined as one initiated in good faith under some act of Congress and continued by use consistent with the character of the claim and necessary for its actual development.

REG. 1. Persons having valid claims under the public-land laws or legal titles to lands within forest reserves are free to occupy and enjoy their holdings, but must not interfere with the purposes for which the reserves are created, and must not cut timber or make use of forest-reserve land without a permit, except within the limits and for the actual development of their claims. Any other use will constitute trespass. (Pp. 91 and 191.)

REG. 2. The Forest Service will endeavor to protect valid claims within forest reserves and make the reserves contribute to their development, but forest reserve officers are required to report illegal holdings.

REG. 3. The Forest Service will grant preference in the use of privileges to actual residents in or near forest reserves.

REG. 4. The supervisor may, within six months from the cancellation or abandonment of any claim to land in a forest reserve, permit the claimant to remove his improvements from the claim, if the supervisor believes that such removal will not injure forest reserve interests.

A person who has made selection of other land in lieu of the land formerly claimed by him may not be allowed to remove his improvements if they are necessary for the use of the Forest Service.

Forest officers should endeavor to ascertain the status of all claims which come under their observation when traveling through the reserve, and should make notes of any facts which show the good or bad faith of the claimant. They should make special examinations and reports only:

- (1) When specifically ordered to do so.
- (2) When they believe that the claimant is making an unlawful use of the land claimed by him or is injuring forest reserve interests.
- (3) When they believe that the claimant settled upon lands in the forest reserve after its establishment and without warrant of law.
- (4) When notified by the local land office that a claimant has applied to make proof, in which case they should, during the period of publication if practicable, make report upon the proper form (654 or 655), both to the local land office and to the Forester. If unable to make the report during the period of publication, they must indorse upon the notice from the land office the following: "The Forest Service protests against this claim and

requests a further investigation," and sign and return it to the local land office, notifying the Forester of their action. If the proof is taken near a supervisor's headquarters he should endeavor to be present to cross-examine the witnesses; otherwise he need not attend the hearing, unless he deems it especially important, or is directed to attend by the Forester. He will, in all protests and reports which he files in the local land office, give the names and addresses of witnesses by whom the facts can be proved.

Forest officers will give all possible assistance to special agents of the General Land Office investigating claims in their respective reserves.

If a forest officer is regularly subpoenaed to attend and testify as a witness for the United States at any hearing, he will obey without question as to his expenses, for which he will be reimbursed by the Forest Service, but for attendance in a case pending in the courts he should present his claim to the clerk of the court and not charge his expenses to the Forest Service. When subpoenaed to appear and testify as a witness for any other party he must obey the subpoena, if he receives proper assurance that his fees and mileage will be paid.

If he can not safely leave his reserve he must ask the local land officers or the attorney to secure a continuance to a date when he can appear. If the continuance is denied he must report the fact of subpoena and the emergency which prevents his obeying it to the Forester, by wire if necessary, and ask for instructions. In no event would he be justified in leaving a fire on the reserve when his presence is necessary to check it.

II. AGRICULTURAL.

Homestead claimants are required to live upon and to cultivate or graze the land embraced in their claims. The Interior Department excuses temporary absences when rendered necessary, but they must be the exception and not the rule, and the land embraced in the entry must be used for the home of the claimant to the exclusion of a home elsewhere. Lands may not be appropriated and patented under the homestead laws if

entrymen use them merely for grazing headquarters during a few weeks or months each year and maintain their homes elsewhere.

Desert-land entries must be for lands incapable of producing a crop without irrigation, and water must be conducted to the claim before the entry will be approved by the Interior Department. (See "Circular from the General Land Office * * * January 25, 1904.")

No claims can be initiated for agricultural land in forest reserves until it is classified as chiefly valuable for agriculture, listed in the local land office, and opened by the Secretary of the Interior, in accordance with the act of June 11, 1906. (Appendix, p. 175, and note the provisions with regard to the Black Hills Forest Reserve, and certain counties in southern California.) Applications for classification and listing must be mailed to the Forester, Washington, D. C., by the applicants, and will secure to them a preference right of settlement and entry unless the land was occupied by a bona fide settler prior to January 1, 1906, in which case the settler has the preference right.

All applications must give the name of the forest reserve and describe the land, examination of which is requested, by legal subdivisions, section, township, and range, if surveyed, and if not surveyed, by reference to natural objects, streams, or improvements with sufficient accuracy to identify the land.

Only one tract of land will be examined on the application of the same person, but if it is rejected or withdrawn a second application will be considered for other land. Applications received at Washington in the same mail for the examination of the same tract of land will

be treated as simultaneous. Notice of all conflicting applications will be given.

Areas known to have been occupied by actual settlers prior to January 1, 1906, will be examined first, and when such areas are found chiefly valuable for agriculture, they will be listed in order that the occupants may make entry under the act. The mere fact that a person has settled upon land will not influence the decision with respect to its agricultural character. Settlers must not expect to include valuable timberland in their entries. Settlement made after January 1, 1906, and in advance of opening by the Secretary of the Interior is not authorized by the act, will confer no rights, and will be trespass.

Settlement and entry under the act will be within the jurisdiction of the Secretary of the Interior, who will issue appropriate instructions. (Appendix, p. 175.)

III. MINING.

Mining claims within forest reserves may be freely sought for, located, developed, and patented in accordance with the mineral land laws and forest reserve regulations. (Appendix, p. 160.) The administration of these laws is under the jurisdiction of the Secretary of the Interior. (Appendix, p. 161.)

The discovery of a mere trace of mineral is not sufficient to make a claim valid, unless both the character of the mineral and the manner of its occurrence are such as to warrant expenditure for development and reasonable expectation of a valuable discovery. (Appendix, p. 192.)

In entries of placer mining claims by associations, if any subdivision is not mineral and this fact is shown,

it will be eliminated from the entry before patent. (Appendix, p. 193.)

Any recognized mineral substance, if found in sufficient quantity, will warrant entry under the mineral land laws—for example, building stone, china or fire clay, coal, limestone, oil, salt, slate, etc., but not brick clay, sand, or gravel. (Appendix, p. 194.)

IV. ADMINISTRATIVE.

Lands needed for supervisors' headquarters, rangers' cabins, gardens, or pastures, and Forest Service nursery sites should be selected, so far as possible, from nonmineral, unclaimed lands, and will be specially reserved from any form of location or entry. Supervisors should recommend sufficient reservations to meet the future as well as the present needs of the Service. If it becomes necessary to recommend the reservation of land probably valuable for mining purposes or embraced in an invalid claim, a special report should accompany the recommendation, showing the necessity for reservation and the character of the claim.

V. STATE LANDS.

Indemnity selections may be made by the States and Territories for granted school sections 16 and 36 when in a forest reserve, and these sections will then become part of the reserve. (Appendix p. 191.) If the reserve was established before the survey of sections 16 and 36 they become forest reserve lands, except in Montana, South Dakota, and Washington; in other States and Territories the grant of these sections will not take effect, except for indemnity selection purposes, until

and unless they are eliminated from the reserve. (Appendix, p. 191.)

The removal of timber from unsurveyed forest reserve lands without permit is trespass and will be promptly reported in all cases, without regard to the fact that after survey such lands may become sections 16 and 36, or railroad sections. (Appendix, pp. 191, 194.)

VI. TOWN SITES.

Lands in forest reserves embraced in valid town-site settlements made before the establishment of the reserves may, unless abandoned, be entered and patented under the town-site laws, without regard to the length of time which has elapsed after their settlement or after the establishment of the reserve. If a petition addressed to the Forester and an investigation made under his direction show that it is necessary and advisable to use forest-reserve land for town-site purposes, an Executive order to exclude the land may be issued, in which case provision will be made for its entry under the town-site laws and the regulations of the Department of the Interior.

VII. RAILROAD LANDS.

A railroad does not acquire title to nor the right to use, lease, or sell land within the primary limits of its grant before Government survey, nor within its indemnity limits before Government survey and approval of selection. (Appendix, p. 194.) When the plats and field notes of survey show land in forest reserves to be mineral in character, use, lease, or sale by a railroad will not be allowed unless its selection of such land has been approved by the Department of the Interior.

VIII. LIEU SELECTION.

No right now exists to exchange private holdings within forest reserves for lands elsewhere, except when such right was established before March 3, 1905, and except the indemnity-selection right for school sections 16 and 36, referred to above (p. 25).

JURISDICTION.

The authority to grant special privileges and rights of way within forest reserves is divided as follows:

I. Applications for permission to occupy or use lands, resources, or products of a forest reserve, which occupation or use is temporary in character, and which, if allowed, will in no wise affect the fee or cloud the title of the United States, are under the jurisdiction of the Secretary of Agriculture.

II. All applications affecting lands within a forest reserve, the granting of which amounts to an easement running with the land, are within the jurisdiction of the Secretary of the Interior.

All privileges within forest reserves, except for timber and grazing, are "Special privileges," and the following are the more usual ones under Class I and must be applied for through the forest supervisors:

CLASS I.

- (a) Trails and wagon roads.
- (b) Schools and churches.
- (c) Hotels, stores, mills, stage stations, apiaries, miners' camps, stables, summer residences, sanitariums, dairies, trappers' cabins, and the like.
- (d) Pastures, drift fences, corrals, and agricultural land.

(e) Canals, ditches, flumes, pipe lines, tunnels, dams, tanks, and reservoirs, within forest reserves, when no easement in the land occupied is required.

(f) Steamboats and ferries operated within forest reserves.

(g) Aerial tramways and wire-rope conveyors, when no easement in the land occupied is required.

(h) Private railroads, tramroads, telegraph, telephone, or electric-power lines, and the plants or buildings necessary for their use, when no easement in the land occupied is required.

(i) The purchase of sand, clay, gravel, hay, and other forest reserve products.

(j) Other similar privileges which do not amount to a disposal of the land.

These privileges are granted either under the act of February 15, 1901 (Appendix, p. 171), under the act of February 28, 1899 (Appendix, p. 170), or under those provisions of the act of June 4, 1897 (Appendix, p. 158), which authorize the Secretary of Agriculture to make rules and regulations for the occupancy and use of forest reserves. (For regulations and instructions governing these special privileges, see pages 61 to 69, inclusive.)

CLASS II.

Privileges and rights of way under this class are granted by the Secretary of the Interior only, and must be applied for through the local land offices, never through forest officers.

The more usual ones in this class and the acts of Congress under which they are granted are as follows:

(a) Rights of way to use water for municipal or min-

ing purposes. (Act of February 1, 1905 sec. 4, Appendix, p. 170.)

(b) Rights of way for irrigation purposes. (Act of March 3, 1891, and amendatory act of May 11, 1898; Appendix, pp. 168, 170.)

(c) Rights of way for railroads. (Act of March 3, 1875, as extended by act of March 3, 1899; Appendix, p. 166, 168.)

For instructions governing these rights of way see page 70.

DURATION OF AND CHARGE FOR PERMITS.

REG. 5. Permits for the use of the forest reserves, unless otherwise specifically fixed by regulation, may be granted by the Forester for any term consistent with forest reserve interests. If, however, land covered by any permit is excluded from a reserve, the permit then expires. The Forester may also make a reasonable charge for any permit, right, or privilege.

REG. 6. Permits are not assignable, and abandonment in favor of another necessitates new application and permit. In case of abandonment and issuance of new permit, the original permittee may sell his improvements to the new permittee, and any payments made by him may apply on the new permit, in the discretion of the Forester. (Appendix, p. 166.)

RECEIPTS.

REG. 7. The Special Fiscal Agent, Washington, D. C., is authorized to receive all payments to the Forest Service. Forest officers are prohibited from receiving any payments. Payments must be by postal or express money

orders or national bank drafts on New York City. Payments to the Special Fiscal Agent must be accompanied by printed form letters of transmittal (Form 861), which will be furnished the payor by the forest officers. The letter of transmittal must designate the transaction on account of which the payment is made, and must be signed by the payor and the forest officer conducting the transaction. A duplicate of the form letter of transmittal, signed only by the forest officer, must at the same time be sent to the Forester.

Forest officers will explain to persons making payments the requirements of Reg. 7. At the time the letter of transmittal is signed by the forest officer and delivered to the payor the form in which the remittance must be made must be fully explained. No action will be taken on any application if the remittance is not made as required by this regulation, but remittance will be returned to the sender. Forest officers should make out the letter of transmittal for the payor and see that it is correct in every particular. Before signing any letter of transmittal the forest officer will make a copy, except when prepared in the Forester's office (p. 63), mark it on the upper margin with rubber stamp or pen and ink with the words "*Duplicate, for the information of the Forester,*" and send it to the supervisor, who will make the proper record, initial it on the lower left-hand corner, and send it to the Forester.

REFUNDS.

REG. 8. Claims for refund of payments, made on the Forest Service, must be addressed to the supervisor, who will forward them to the Forester with his recommendations. If the Forester approves the claim, the amount found not due the United States will be refunded by the Special Fiscal Agent upon presentation of a voucher prepared in accordance with the Fiscal Regulations of the Department of Agriculture and approved by the Forester.

Claims for refunds should be sent to the supervisor of the reserve on which the original payment was made, who will send them to the Forester with his recommendations. If the claim is allowed, a voucher will be prepared and sent to the claimant for his signature and returned to the Forester, who, if he approves the voucher, will instruct the Special Fiscal Agent to pay the claim. Refunds on grazing permits are subject to special restrictions (p. 79).

BONDS, CONTRACTS, AND STIPULATIONS.

REG. 9. The Forester may demand and approve such bonds, require such stipulations, and approve and execute such leases and other contracts as are required or permitted by law or these regulations, or as the Secretary of Agriculture is required or permitted to demand, approve, require, or execute in matters affecting the Forest Service, except contracts for advertising.

FREE USE OF TIMBER AND STONE.

The law gives the Secretary of Agriculture discretion to allow or refuse the free use of forest reserve timber and stone, under such regulations as he may prescribe, by "bona fide settlers, miners, residents, and prospectors for minerals, for firewood, fencing, building, mining, prospecting, and other domestic purposes as may be needed by such persons for such purposes, such timber to be used within the State or Territory, respectively, where such reservations may be located, and by the United States." (Appendix, p. 159.)

REG. 10. The free-use privilege may be granted to settlers, farmers, prospectors, or similar persons who may

not reasonably be required to purchase, and who have not on their own lands or claims, or on lands controlled by them, a sufficient or practicably accessible supply of timber or stone for the purposes named in the law. It may also be granted to school and road districts, churches, or cooperative organizations of settlers desiring to construct roads, ditches, reservoirs, or similar improvements for mutual or public benefit. Free use of material to be used in any business will be refused, as, for example, to saw-mill proprietors, owners of large establishments or commercial enterprises, and companies and corporations. The free-use privilege will not be given to any trespasser.

Whether an applicant is entitled to free use must be decided by the forest officer who receives the application. In all cases not clearly covered by the letter of the regulations he should be guided by their spirit, especially as expressed by the term "those who may not reasonably be required to purchase," and by the distinction between personal and commercial use. A member of a corporation is not necessarily debarred from free use of fuel for his own home, although his ability to secure it from another source should be considered if the reserve supply is limited and in demand by more needy applicants. Residents of towns and villages engaged in business or earning a livelihood are reasonably expected to purchase fuel and building material for town dwellings and other home structures. A settler may receive a liberal allowance for his own use, but he is not entitled to free material for sale or profit. There is no more reason for giving a hotel keeper or merchant timber without charge solely to build or warm his hotel or store than for giving him a stock of goods, yet it need not be refused the proprietor of a small establishment when it will be used chiefly by himself and his family. Prospectors should be assisted to develop their properties, but owners of mines, who employ men on wages, should be required to buy. Free timber for use on alleged fraudulent claims may be granted for fuel only, pending the final determination of title to the claims.

REG. 11. Except in cases of great and unusual need, no applicant will be given more than two free-use permits in one year, nor may the aggregate amount of material granted in the two permits exceed \$20 in value, except in the case of schools or road districts, churches, and non-commercial cooperative organizations, when the supervisor may, in his discretion, extend the amount to any value not exceeding \$100. The duration of any permit will be fixed by the issuing officer, and will not exceed six months. If the permittee fails to remove timber within the time stated in the permit, the forest officer may grant the timber to another applicant. A permit will not be renewed to an applicant who has not availed himself of the privilege until the tract has been open to application by others for thirty days. In cases of unusual emergency, however, it may be extended by the supervisor, or, if for \$20 or less, by a ranger authorized to grant free use.

The object of limiting the number of permits to two in one year is to overcome the possibility of having otherwise to issue permits at any and every time it may occur to an applicant that he would like to procure timber, when by a little forethought and calculation he could probably supply his needs by two applications within the year.

REG. 12. All supervisors, all forest rangers and deputy forest rangers, and such other forest officers as the supervisor may designate, are authorized to grant or refuse free-use permits up to \$20 in value under these regulations, and to make such restrictions as to quality, amount, location, and removal as they deem necessary to protect the reserves. It is their duty to furnish cheerful assistance to applicants, to act promptly upon all applications,

and, in general, to follow as liberal a policy in the matter of free use as the interests of the reserves and the proper performance of their other work will allow.

The free use business of forest reserves will be conducted mainly by the rangers. Subject only to general restrictions, instructions, and supervision, they will decide the rights of applicants to the privilege, assign and direct the removal of material, and be responsible for results.

REG. 13. No free use material may be taken without a permit. Application for a permit may be made verbally or in writing to any officer authorized to grant it. If it receives his approval he will see that the applicant understands the regulations governing the privilege and will fix the amount, kind, and location of the material and the terms under which it must be taken. The privilege of free use must never be granted verbally.

Both the forest officer and the applicant will sign an agreement to these conditions upon the prescribed form, which will be forwarded at once to the supervisor as a part of the records of his office. The permit will be filled out, signed, and delivered to the applicant by the forest officer, who will also record it upon the stub in his notebook. These duplicates will be used by the supervisor in preparing his annual statement of free use business, to be submitted immediately after the close of the calendar year. No map, estimate sheet, forest description, or report need be made unless desired by the ranger or supervisor for his own use. The agreement forwarded to the supervisor should contain sufficient information to enable the latter to record the case properly. Any additional facts may be stated in a letter.

The forest officer issuing the permit, unless he should be the supervisor, who may instruct a ranger to do so, should designate the timber to be cut, by the most practicable means, not necessarily uniform in every case. Living timber must be marked. Dead timber may be marked or, if practicable, an area may be blazed or defined by natural boundaries, and the class of trees to be taken

specified. The procedure should be made as simple and economical for both the user and the forest officer as is possible without danger to reserve interests.

Although simple methods and the exercise of judgment are encouraged, there should nevertheless be no tendency to underrate the importance of free-use business or the necessity of considering the good of the reserve. The use of dead material should be encouraged, and the assignment of green timber, when really necessary, must be where it can best be spared. Whenever practicable, dead and defective trees and inferior species should be taken. The cutting will thus improve the forest by taking out the less desirable trees. Low stumps and full use of all trees cut must be required, as well as careful disposal of refuse. Officers in charge of cutting will be held responsible if unnecessary damage is done to young growth or standing timber or if the reproduction of the forest is not properly considered. The violation of any of the regulations governing free use or of the terms of permit constitutes trespass and should be dealt with accordingly, but there should be no failure on the part of the forest officer to make all points clear to the applicant before the permit is granted.

REG. 14. Timber granted under a free use permit may be cut by an agent or may be sawed by a local sawmill, but the work so done must not be paid for by a share of the material.

SALE OF TIMBER.

All timber on forest reserves which can be cut safely and for which there is actual need is for sale. Applications to purchase are invited. Green timber may be sold except where its removal makes a second crop doubtful, reduces the timber supply below the point of safety, or injures the streams. All dead timber is for sale. (Appendix, p. 158.)

The prime object of the forest reserves is use. While the forest and its dependent interests must be made permanent and safe by preventing overcutting

or injury to young growth, every reasonable effort will be made to satisfy legitimate demands.

Timber cut from forest reserves may be handled and shipped like any other timber, except that it will not be sold for shipment from regions where local consumption requires the entire supply, or is certain to do so in the future. Also, the law prohibits export from the State of timber cut from the Black Hills Forest Reserve in South Dakota, except under special conditions. (Appendix, p. 163.)

Anyone may purchase except trespassers upon the forest reserves or the public domain. There is no limit but the capacity of the forest to the quantity which may be sold to one purchaser, except that monopoly to the disadvantage of other deserving applicants will not be tolerated.

The time allowed for the removal of timber will depend upon the amount purchased. It will always be sufficient for reasonably diligent work, but speculation by holding for rise in value will not be permitted.

In all cases the first step for the prospective purchaser is to consult the nearest forest officer. Inquiries or applications should never be sent to Washington direct.

There are three classes of sales:

(A) Not over \$20 worth of dead timber (p. 38).

These sales may be made directly by any supervisor, forest ranger, or deputy forest ranger, and such other forest officers as the supervisor may designate with the approval of the Forester. No delay is involved. The applicant should consult in person the nearest forest officer, who will designate the timber, fix the terms of sale, and at once, upon assurance that full advance

payment has been forwarded to the Special Fiscal Agent, permit cutting and removal.

(B) Not over \$100 worth of dead or living timber (p. 38).

Application may be made through any forest officer, but the forest supervisor must approve the sale. The only delay involved is the time required for an estimate and report to the supervisor. Upon the latter's approval and permission, after the forwarding of the advance payment required, cutting may begin. Repeated class (b) sales to the same purchaser within a short time will not be allowed unless the timber involved has been examined and advertised for sale.

(C) Over \$100 worth of dead or living timber (p. 39).

Sales of more than \$100 must always be advertised and may be approved only by the Forester and such officers as he may designate. The application and examining officer's report, if indorsed by the supervisor, are sent to Washington. Upon the Forester's approval an advertisement for bids is published in the local papers for thirty days, after deposit to cover this expense has been sent by the applicant. If the applicant is the successful bidder, his approved application forms the agreement. His deposits apply upon the first payment, and the supervisor permits cutting at once. If his bid is unsuccessful his deposits are returned.

KINDS AND METHODS OF SALES.

REG. 15. All forest rangers, deputy forest rangers, and such other forest officers as the supervisor may designate, with the approval of the Forester, are authorized to sell dead timber in amounts not exceeding \$20 in value, and

all forest supervisors to sell dead or living timber worth not more than \$100. The Forester is authorized to make timber sales for larger amounts, and to delegate this authority in special cases.

The methods of sale are as follows:

A. RANGER SALES.

Dead timber only, not over \$20 in value. Advertisement not required (p. 36).

A request to purchase dead timber not over \$20 in value may be acted upon by any forest ranger, deputy forest ranger, any forest officer designated by the supervisor with the approval of the Forester, or by any supervisor. The forest officer makes an examination, fixes the terms of sale, and designates the timber to be cut. Formal application is made out in duplicate and signed by the purchaser, who also forwards payment in full to the Special Fiscal Agent, with a letter of transmittal given him by the forest officer, who will at once fill out a copy, mark it "Duplicate," and forward it to the Forester through the supervisor (p. 29).

The duplicate should state, in addition to information given in the original, the amount of timber of each species included in the sale and the price per thousand feet or other unit. The forest officer, upon being shown the receipt, if the payment is made by express or postal money order, or the draft itself if by national bank draft on New York, as assurance of payment will approve both copies of the application and at once permit cutting and removal. He will at once forward one copy to the supervisor, give the other copy to the purchaser, and record the terms of the sale in his notebook. He will notify the supervisor as soon as the timber is removed and all terms of the agreement fulfilled, and recommend that the sale be closed.

B. SUPERVISOR SALES.

Dead or living timber, not over \$100 in value. Advertisement not required (p. 37).

An examination on the ground is made by the supervisor, or for him by a subordinate. The results are recorded and discussed

with the applicant, and form the basis of his formal application, which is filled out in duplicate and signed by him.

If the supervisor approves the application, the applicant forwards first payment or full payment, as agreed upon, to the Special Fiscal Agent, with a letter of transmittal furnished him by the forest officer. A copy of the letter of transmittal is at once forwarded to the Forester by the supervisor, stating, in addition to the information given in the original, the amount of timber of each species and price per thousand feet, or other unit. Upon assurance that payment has been made, the supervisor approves the application and permits cutting to begin. One copy of the approved application is retained by the supervisor and one returned to the purchaser with a copy of the Use Book.

C. FORESTER SALES.

All sales over \$100 in value. Only after advertisement (p. 37).

The steps are the same as in Class B sales until the supervisor has received the formal application in duplicate, signed by the applicant. If he decides to recommend the sale, the applicant then forwards to the Special Fiscal Agent a deposit of \$50 to cover advertisement instead of the first payment, as in a nonadvertised sale.

Upon assurance that the deposit has been forwarded to the Special Fiscal Agent, the supervisor forwards both copies of the application to the Forester for approval, accompanied by the examining officer's report and his own definite recommendations. If he recommends approval of the application unmodified, he will also initial both copies.

If the application is approved by the Forester, the advertisement is forwarded to the supervisor for publication.

Prospective purchasers then submit their bids to the Forester, at the same time forwarding to the Special Fiscal Agent the deposits required by the advertisement.

Upon evidence that the necessary deposit in each case has been made, and after notice from the supervisor on Form 935 that one publication of the advertisement has actually appeared the bids are opened by the Forester.

If the original applicant is the successful bidder, one copy of the application is approved by the Forester, and becomes the agree-

ment; it is returned to the purchaser through the supervisor. The duplicate is placed on file in the Washington office, and a third copy is made and sent to the supervisor for his information. If the successful bidder is not the applicant, a contract is prepared in triplicate in the Washington office and sent to the supervisor, who retains one copy and has the purchaser execute two copies, which are returned to the Washington office for the approval of the Forester. When approved, one copy is placed on file in the Washington office and the other returned to the purchaser through the supervisor. Cutting may begin when the purchaser has signed the contract, and need not await final approval of the Forester.

REG. 16. The supervisor may in his discretion require that a deposit shall be made with the Special Fiscal Agent before examination of or report on any application to purchase timber.

PAYMENTS AND DEPOSITS.

REG. 17. All timber must be paid for before it is cut. If in any sale the timber available does not reach the amount estimated and paid for, the necessary refund will be made, provided the purchaser has complied with the terms of the sale.

REG. 18. In any sale, unless otherwise ordered, the timber may be paid for in one or more payments, as agreed. In sales not over \$100 the partial payments must not exceed three.

The payer will be furnished by the forest officer with a form letter of transmittal bearing the designation of the sale, which must accompany the remittance to the Special Fiscal Agent. (Reg. 7, p. 27.)

CONDITIONS AND BONDS.

REG. 19. The period allowed for the removal of the timber, which in no case will exceed five years, must be fixed in the agreement. If at the expiration of this period

the purchaser has not removed all his timber, he forfeits all right to any timber not yet removed and to his purchase money; but in case failure to comply with this restriction was unavoidable, the Forester may, in his discretion, extend the limit to prevent hardship.

REG. 20. Timber cut from any forest reserve may be sold in any market anywhere, except that from the Black Hills Forest Reserve in South Dakota insect-infested timber only may be exported. (Appendix, p. 163.)

REG. 21. In exceptional cases purchasers may be required to give bond to comply with the terms of agreement. The responsibility of the sureties must be established by the supervisor.

Bonding companies are usually willing to issue continuing bonds for an indefinite period. This form of bond is acceptable and may be made to cover all the operations of an applicant.

REG. 22. Failure to observe any of the terms of the agreement constitutes breach of contract. Violation of the following four rules constitutes trespass:

- (a) No timber may be cut or removed until it is paid for.
- (b) No timber may be removed until it has been scaled and stamped by a forest officer.
- (c) Timber may be cut only on the area designated by the forest officer.
- (d) No living trees may be cut until marked or otherwise unmistakably designated by a forest officer.

ADVERTISEMENTS AND BIDS.

The law requires that advertisements of all sales over \$100 must be published for not less than thirty

days in one or more newspapers of general circulation in the State or Territory. (Appendix, p. 158.)

REG. 23. Advertisements of sales must announce the time and place of filing bids and the location and approximate amount of the timber, and will refer intending purchasers to the forest supervisor for full information. Before any advertisement based upon application is published the applicant is required to deposit with the Special Fiscal Agent of the Forest Service a sum sufficient to cover the cost of advertising. If the depositor be the successful bidder, this deposit is credited on the purchase price of the timber; but if the timber is awarded to another the deposit is returned. If the applicant should fail to bid during the time fixed for filing bids, the deposit may, at the discretion of the Forester, be retained to pay the cost of advertising. A deposit, to be specified in the advertisement, must accompany each bid. The right is reserved to reject any or all bids.

Upon the recommendation of the supervisor, timber for which there is likely to be a demand and which may be cut with benefit to the forest may be advertised in advance of application to purchase.

REG. 24. In sales above \$500, allotments, at the highest price offered, may be made to several bidders to prevent monopoly.

REG. 25. After timber has been advertised but not sold, any portion of it may be sold without further advertisement. (Appendix, p. 158.)

ADVANCE CUTTING.

REG. 26. The Forester may permit the cutting and removal of timber in advance of an advertised sale, when the applicant has made a deposit covering the value of

the timber to be cut and removed and has agreed to pay for all timber actually cut under the privilege or advance cutting at the rate of the highest price bid. (Appendix, p. 159.)

EXAMINATION OF TIMBER APPLIED FOR.

Unless a detailed working plan has been made and full information is already at hand, the first step after the receipt of any preliminary application is to examine the timber. The most vital question concerning the removal of any living timber is whether it can be spared. To decide this question the approving officer must know whether another growth of timber will replace the one removed or whether the land will become waste, whether the water supply will suffer, and whether the timber is more urgently needed for some other purpose. One of the foremost points to be studied is the reproduction of the forest under various conditions. Wherever possible a stand of young, thrifty trees should be left to form the basis for a second crop. Good reproduction and in mixed forests reproduction of the more valuable species must be assured before a sale can be recommended. The number of small trees, their kind, their vigor, the seed-bearing capacity of those which would be left after cutting, the possible destruction of the young growth by logging or fire, must all be considered fully. The growth on similar areas which have been logged affords the best guide in this study.

If the timber may be cut safely, then the best method of cutting must be decided; whether all the trees below a certain diameter should be left to form the next crop or only selected seed trees of the valuable species; whether the surrounding timber will furnish enough and the right kind of seed; or, in other words, what system will be surest to bring about satisfactory reproduction. The object of a sale is not solely to realize the greatest possible money return from the forest. The improvement and future value of the stand both for forest cover and for the production of timber must always be considered. In many cases the need of preserving an unbroken forest cover for the protection of watersheds will influence the method of cutting recommended. All this, as well as to fix the

quantity and location of timber to be sold, requires an accurate knowledge of conditions on the ground sufficient to decide upon the terms of the sale.

Wherever practicable sales should be made by area rather than by specific amounts of timber. The areas selected should be based mainly upon topography and should conform to the natural boundaries of logging operations. Legal subdivisions are seldom desirable. No small bodies of timber should be left which can be taken at reasonable cost when the rest of the timber is cut but which if left uncut would be isolated and without value. All timber should be included in a sale which would naturally be logged to a given stream, road, or mill site. If this is not possible, an average proportion of the most and least desirable timber should be taken so that the stumpage value of the remaining timber in the locality will not be reduced.

Except in small, dead timber sales of Class A (p. 36) or in free use cases the examination of any tract from which timber is sought must include—

- (1) Mapping.
- (2) Forest description and estimate of timber.
- (3) Recommendations, with reasons.

MAPPING.

Every report upon timber recommended for sale must contain at least one map. This map must show not only the proposed sale area, but also its location with reference to surrounding forest, topographic features, such as ridges, streams, and roads, proposed roads, camps, and mill sites, lands under patent, or claims, and surveyed lines, if any.

The map must include enough of the surrounding forest to show that the timber applied for may be removed without rendering the surrounding timber inaccessible and unsalable. Burns, barren or open land, forest types, and the limits of merchantable timber on slopes should be shown so far as they affect the desirability of allowing the sale. Within the area applied for itself the forest types should be shown, and the topography should be indicated in sufficient detail to demonstrate the ease or difficulty of logging the timber, and to show the natural boundaries of compartments or logging areas. In small sales one map will show all

these data, so that compartment maps are unnecessary, the compartments being indicated by dotted lines. This map should be drawn to a scale of not less than 4 inches to the mile.

Large tracts require location maps on a small scale, showing only the outline of the proposed cutting, the section lines or other location points, the private lands, if any, and dotted lines to represent the accompanying compartment maps on a larger scale. The latter may then be numerous and large enough to show necessary detail.

The proposed cutting area, as recommended by the examining officer and covered by his estimate and description, whether or not he agrees with the applicant, must always be clearly defined on the map; so must every part for which there is a separate estimate, description, or recommendation.

DESCRIPTION AND ESTIMATE.

Always estimate the timber upon the definite cutting area recommended and shown on the map. An average for any other area of which this tract forms a part is insufficient.

If uncertain conditions of sale or differences between the forest officer and the applicant make it likely that the area recommended may be extended or reduced, then estimates for both the larger and smaller area are required. Otherwise the cutting area should be fixed and estimated by itself, without reference to other lands, whether in the same section or quarter section or not.

Survey lines, surrounding forest, and topography will be shown on the map, but the estimate sent in ordinarily need not cover any land not in the cutting area. In many cases, however, where applications for adjoining timber are expected and where the whole body can be most economically examined at one time, the estimate may with advantage include a larger area, so that subsequent sales can be made at once without further examination. In such cases the tract must be divided into compartments, which should be determined not by legal subdivisions but by the natural boundaries of logging operations, such as ridges and streams, open lands, unmerchantable forest, etc., which will form the limits of successive sales. A separate description and estimate must then be submitted for each compartment. The same method should be followed in estimating large bodies of timber which are to be

sold at once. Whenever the forest on different compartments requires different treatment or different stumpage prices, the terms of sale should provide for the needs of each. When there is more than one forest type within a compartment, the estimate for the whole compartment must be based upon separate estimates of the stand per acre and area in each type. When the application does not include all the merchantable timber on a tract, the forest officer must submit an estimate of the merchantable timber which will be left after logging. This estimate should include seed trees, young timber which it is deemed inadvisable to cut, and all other merchantable timber not included in the application. In each case the diameter limit, if one is followed, must be specified.

RECOMMENDATIONS.

Among the points to be covered are: Effect upon water flow, possible profit in holding the timber for a future higher price, the need for the timber, the possibility or difficulty of getting it elsewhere, the necessity of preserving the timber, if limited in amount, for important local needs, the reliability of the applicant, and the price which should be obtained. The last is of great importance, especially in sales not requiring advertising, and should be decided not by custom or local stumpage prices, but by the actual value of the timber as determined by its character, ease of logging, and distance from market. Timber on a gentle slope and near a mill or drivable stream may be worth more than twice as much as less accessible timber. The forest officer should find out the cost of marketing all timber and recommend prices which will make it all about equally desirable. The forest description should always state the cost of each step of logging and manufacture, the sale value of lumber or other material manufactured from timber procured from a forest reserve, and the price which competing lumber from outside sources brings. The estimated profit of the purchaser if the sale is approved at the stumpage rates recommended must also be given. Separate figures upon these points must be submitted for each species included in the sale. In recommending prices for timber used by mining companies, power companies, etc., which is not to be sold in the general market, the cost to the prospective purchaser of securing the material required

from the nearest available source outside of the reserve must be fully investigated and reported upon. No application will be approved by the Forester unless the report of the examining officer shows definitely that the full market value of the timber will be received.

If the space for recommendations in the description blank is insufficient, additional sheets may be used. The description of each one of several compartments on one tract must contain separate recommendations unless all compartments are to be handled alike.

PREPARATION OF FORMAL APPLICATION.

If the forest officer decides to recommend a sale, he will explain to the applicant all the requirements of the regulations and the special conditions for that particular sale. All points about the proposed cutting must be discussed fully before the application is made out. The following points must be considered so far as they apply, and the forest officer will add others when necessary:

- (1) To what approximate diameter limit 3 feet from the ground should cutting be allowed for the different species?
- (2) Should seed trees be left; and if so, of what species and how many per acre?
- (3) To what diameter in the top should trees be used?
- (4) Should the brush be piled, and how?
- (5) Should the purchaser clean up down timber not cut by him and burn brush and tops?
- (6) How high should the stumps be? (They should usually not be higher than the tree is thick.)
- (7) Should felling be done with saws?
- (8) Should hewing be allowed except at skidways and openings?

- (9) During what months should cutting be allowed?
 - (10) What timber may be used for skidways, roads, and camps, and should it be paid for?
 - (11) Where should camps, roads, dams, etc., be located?
 - (12) Should the cutting of desirable species only be allowed, or should the purchaser be required to remove all merchantable timber on the tract?
 - (13) To what extent will young growth be damaged by the proposed lumbering, and what special precautions are necessary to prevent it?
 - (14) How and where will logs be skidded for scaling? If logs are not skidded, how will extra cost of scaling be paid?
 - (15) What valid private claims are included in the sale area?
 - (16) What precautions are necessary to prevent forest fires, and how many employees of the purchaser will be available to assist the forest officers in fighting fire?
 - (17) If a bond is required, what should be its conditions and amount?
- In applications for dead timber the following points should also be considered:
- (1) Should all, or only standing, dead timber be taken?
 - (2) Should all wood sound enough for fuel be taken?
 - (3) Should all trees above a given size (what size?) be taken?
 - (4) Should the purchaser pile the unsound portions of down trees from which he uses the sound parts?
- Dead timber includes only timber, standing or down,

which is entirely dead, and in no case trees which are apparently dying. All conifers having any green branches are classed as living timber. Since deciduous trees, such as most hardwoods, have no foliage in winter, special care is needed to decide when they are dead. Trees dead at the top and green below, generally called spike-topped trees, are classed as living, and must never be cut under dead-timber permits.

If the applicant agrees to the conditions as explained to him, a formal application is prepared according to the instructions given above for each class of sales. The quantity and location of timber described is based upon the forest officer's examination, and must agree with the map and the description and estimate. All conditions and restrictions to govern the cutting must also be included.

[Form 821. Supersedes Forms 574 and 580.]

TIMBER SALE.

— (date), 190—. Forest Reserve.

— (I or we), —, of —, State of —, hereby apply to purchase — ("in accordance with bid submitted in pursuance of a duly authorized proposal to bid," if sale has been advertised) all — (the merchantable dead timber standing or down; all the live timber marked for cutting by the forest officer, etc.), located on — (if surveyed land, give legal subdivisions; if unsurveyed, give metes and bounds with reference to some well-known landmark), estimated to be — (give quantity, species, and material).

If this application is approved — ("and if bid is accepted," if sale has been advertised), — (I or we) do hereby, in consideration of the sale of this timber to — (me or us), promise to pay the Special Fiscal Agent, Forest Service, at Washington, D. C., the sum of — dollars (\$—), — (to cover cost of advertising,

first payment on sale, or full payment, as the case may be. If payment, give rate per M or cord and terms) credit being given for the sums, if any, heretofore deposited with the said Fiscal Agent in connection with this sale.

And —— (*I or we*) further agree and promise to cut and remove said timber in strict accordance with the following and all other regulations governing timber sales now or hereafter prescribed by the Department of Agriculture:

1. No timber will be removed until it has been scaled by a forest officer.
2. No timber will be cut until it has been paid for.
3. No timber will be cut except that designated on the specified area by the forest officer.
4. Twice the contract price will be paid for any merchantable timber cut and left in the woods.
5. All merchantable timber used in buildings, skidways, bridges, road building, or other improvements will be paid for at the contract price.
6. No unnecessary damage will be done to young growth or to trees left standing.
7. The approximate diameter limit at a point 3 feet from the ground to which living trees are to be cut is ——.
8. Stumps will not be cut higher than ——.
9. All trees cut will be used to a diameter of —— inches in the tops ——.
10. Tops will be lopped and piled compactly at a safe distance from living trees.
11. All dead timber will be cut which is sound enough for ——.
12. Unless extension of time is granted, all timber will be cut and removed within —— year — from date of approval of sale.
13. Timber will be scaled by Scribner rule, Decimal C, or counted as prescribed in the Use Book or specifically provided in the contract.
14. —— (*Insert special conditions, if any, relating to camps, dams, roads, skidways, log chutes, etc.*).
15. During the time that this contract remains in force both —— (*I or we*) and —— (*my or our*) employees will do all in our power, both independently and upon the request of forest officers, to prevent and suppress forest fires.

No Member of or Delegate to Congress is or shall be admitted to any share, part, or interest in this agreement or to any benefit to arise therefrom. (See sections 3739 to 3742, inclusive, Revised Statutes of the United States.)

Refund of deposits under this contract will be made only at the discretion of the Forester, except when opportunity to cut any timber covered by such deposits can not be furnished by the Forester.

And as a further guaranty of a faithful performance of the conditions of this agreement, —— (*I or we*) deliver herewith a bond in the sum of ——, which bond shall be forfeited, together with all moneys paid or promised under this contract, upon failure on —— (*my or our*) part to fulfill, all and singular, the conditions and requirements herein set forth or made a part hereof.

Signed in duplicate this —— day of ——, 190—.

_____.
(Signature of purchaser.)

_____.
(Signature of purchaser.)

Witnesses:^a

_____.
_____.

Approved under the above conditions ——, 190—.

_____.
(Signature of approving officer.)

_____.
(Title.)

^a Signature of two witnesses required if sale is over \$100.

MARKING AND CUTTING.

When the sale of any green timber is assured the supervisor will order the marking of all trees to be cut. This is imperative. Where only dead timber is purchased and there is no danger that living timber will be cut the forest officer may, instead of marking every tree, blaze and mark the boundary of the cutting area and instruct the purchaser in the manner of cutting.

Standing timber must be marked "U. S." near the ground, so that every stump will show the mark. Where snow may conceal the marking from the cutters, each tree must also be marked at a point several feet from the ground.

The officer in charge must see that the cutting is confined to the least possible area and not scattered here and there over the entire tract. So far as practicable all branches of the logging operations must keep pace with each other. Brush piling must never be allowed to fall behind the cutting and removal of logs, ties, and other material. The ground must be cleared as fast as the work proceeds.

The best way to pile brush and refuse is not everywhere the same, but the object is always to insure easy and clean burning as soon as possible, with the least injury to standing timber and seedlings. The piles should be compact and large enough to kindle easily and burn clean without repiling. Large top logs, broken portions of the trunk, and rejected butts should not be piled with the smaller slash. Such piles are loose and difficult to burn cleanly. Neither should the limbs be thrown across heavy top logs and left in the form of loose windrows. The result of such piling is partially burned slash with a charred bottom log which will not rot. The tops of small trees may be piled with the limbs, but in large timber the branches should be lopped and piled alone, leaving the top logs, butts, and sections of the trunk where they lie. When possible, the piles should not be nearer than 15 feet from standing green trees or dead trees having many branches or a covering of moss which might be ignited. Where the density of the standing timber makes this impracticable, openings should be made by the cutting, or if this can not be done, the piling should be near the least valuable trees and where there is least danger of the fire spreading. The most economical method of burning brush is to burn it as logging proceeds. Where weather conditions make it safe, as when the ground is covered with snow or the forest floor is so damp that fires will not run, fires are started at convenient points, and as limbs are cut from the trees they are thrown on the nearest fires. A mass of live coals is soon formed, which will quickly destroy even large limbs.

SCALING.

All timber must be scaled by a forest officer before it is removed from the tract or from the points where it is agreed that scaling shall be done. Each stick of saw logs, timbers, and poles must

be scaled separately. Rough averaging of diameters or lengths is not allowed.

All timber will be scaled by the Scribner "Decimal C" log rule. This rule drops the units of the estimated number of board feet in logs, and gives their volumes in the nearest number of tens. Thus, the contents of a 16-foot log 12 inches in diameter, which is 79 board feet according to Scribner's computation, is evened off to 80 and given as 8: the 303 board feet in a 24-inch log 12 feet long are rounded off to 300, and appear as 30 in the table. In other words, the rule gives in each case one-tenth of the contents of each log, which must be multiplied by 10 whenever the total number of board feet in a log is wanted. When a total scale is desired all that is necessary is to add one cipher to the sum of the numbers read from the scale stick, excepting the contents of 6 and 8 foot logs 6 and 7 inches in diameter. These are given as 0.5, which multiplied by 10, gives 5 feet as their actual contents.

INSTRUCTIONS TO SCALERS.

Measure diameters inside the bark.

Round off the diameter to the nearest inch above or below the actual diameter.

Make proper deductions for defects in logs.

Make no deduction for curve or "sweep" in logs over 16 feet long.

Scale logs over 16 feet long as two or more logs, in lengths not less than 12 feet, when practicable.

The following table shows how the lengths should be divided when scaling logs 18 to 60 feet long. The number of inches to be added to the diameter at the small end of each log, to cover taper, is placed under each length.

For example, a 42-foot log 16 inches in diameter at the top would be scaled as—

One 12-foot log with a diameter of 16 inches.

One 14-foot log with a diameter of 17 inches.

One 16-foot log with a diameter of 19 inches.

Total length.	Log lengths.			Total length.	Log lengths.					
	Feet.	Butt log.	Sec-ond log.	Third log.	Top log.	Feet.	Butt log.	Sec-ond log.	Third log.	Top log.
18	10'	.....	.....	8'	40	16'	12'	.....	12'	
Increase	1"	.....	.....	0"	Increase	3"	1"	.....	0"	
20	10'	.....	.....	10'	42	16'	14'	.....	12'	
Increase	1"	.....	.....	0"	Increase	3"	1"	.....	0"	
22	12'	.....	.....	10'	44	16'	16'	.....	12'	
Increase	1"	.....	.....	0"	Increase	3"	1"	.....	0"	
24	14'	.....	.....	10'	46	16'	16'	.....	14'	
Increase	1"	.....	.....	0"	Increase	4"	2"	.....	0"	
26	14'	.....	.....	12'	48	16'	16'	.....	16'	
Increase	1"	.....	.....	0"	Increase	4"	2"	.....	0"	
28	14'	.....	.....	14'	50	14'	12'	12'	12'	
Increase	2"	.....	.....	0"	Increase	4"	3"	1"	0"	
30	16'	.....	.....	14'	52	16'	12'	12'	12'	
Increase	2"	.....	.....	0"	Increase	4"	3"	1"	0"	
32	16'	.....	.....	16'	54	16'	14'	12'	12'	
Increase	2"	.....	.....	0"	Increase	5"	3"	1"	0"	
34	12'	12'	.....	10'	56	16'	16'	12'	12'	
Increase	3"	1"	.....	0"	Increase	5"	3"	1"	0"	
36	12'	12'	.....	12'	58	16'	16'	14'	12'	
Increase	3"	1"	.....	0"	Increase	5"	3"	2"	0"	
38	14'	12'	.....	12'	60	16'	16'	14'	14'	
Increase	3"	1"	.....	0"	Increase	5"	3"	2"	0"	

This table is intended to be used simply as a guide. The allowances for taper may be varied to conform to the *actual* taper when necessary.

Ties may be actually scaled, or reckoned as follows:

Eight-foot ties, standard face, $33\frac{1}{3}$ board feet, each, or 30 ties to the thousand; 6-foot ties, standard face, 25 board feet, each, or 40 ties to the thousand.

Shake and shingle-bolt material is measured by the cord.

Lagging may be measured by the cord, or linear foot, or where split lagging is used, by the board foot, each cubic foot counting as 12 board feet.

Poles, posts, piles, and stulls may be scaled, sold by the linear foot, or sold by the piece, as circumstances warrant.

Unsound or crooked logs will be scaled down to the actual contents of merchantable material. All partially unsound but merchantable stuff must be scaled, whether removed or not. In ground-rotten timber, butts which, though unsound at heart, contain good lumber toward the outside, are frequently left in the woods. Where such material will pay for sawing, the forest

officer will scale it at what he considers its true value and include it in the amount purchased.

Logs which are not round will be scaled on the average diameter.

In the absence of a scale stick, or where the position of logs in the pile makes its use difficult, the diameters and lengths may be tallied and the contents figured from a scale table later.

When necessary and possible the purchaser will be required to mark top ends of logs to avoid question when they are scaled in the pile.

The purchaser may be required to skid logs of different lengths in separate piles for convenience in scaling.

The forest officer should always insist on having one end of piles or skidways even, so that ends of logs may be easily reached.

When scaled each stick of sawlogs, timbers, ties, posts, poles, or piles must be stamped on at least one end. Cordwood must be stamped at both top and bottom of each pile and at least 12 pieces in each cord must be stamped.

SCRIBNER LOG RULE.

[Decimal "C"]

Diameter.	Length—Feet.						Diameter.
	6	8	10	12	14	16	
Inches.	Bd. ft.	Bd. ft.	Bd. ft.	Bd. ft.	Bd. ft.	Bd. ft.	Inches.
6	0.5	0.5	1	1	1	2	6
7	0.5	1	1	2	2	3	7
8	1	1	2	2	2	3	8
9	1	2	3	3	3	4	9
10	2	3	3	3	4	6	10
11	2	3	4	4	5	7	11
12	3	4	5	6	7	8	12
13	4	5	6	7	8	10	13
14	4	6	7	9	10	11	14
15	5	7	9	11	12	14	15
16	6	8	10	12	14	16	16
17	7	9	12	14	16	18	17
18	8	11	13	16	19	21	18
19	9	12	15	18	21	24	19
20	11	14	17	21	24	28	20

SCRIBNER LOG RULE—Continued.

Diameter.	Length—Feet.						Diameter.
	6	8	10	12	14	16	
Inches.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Inches.
21	12	15	19	23	27	30	21
22	13	17	21	25	29	33	22
23	14	19	23	28	33	38	23
24	15	21	25	30	35	40	24
25	17	23	29	34	40	46	25
26	19	25	31	37	44	50	26
27	21	27	34	41	48	55	27
28	22	29	36	44	51	58	28
29	23	31	38	46	53	61	29
30	25	33	41	49	57	66	30
31	27	36	44	53	62	71	31
32	28	37	46	55	64	74	32
33	29	39	49	59	69	78	33
34	30	40	50	60	70	80	34
35	33	44	55	66	77	88	35
36	35	46	58	69	81	92	36
37	39	51	64	77	90	103	37
38	40	54	67	80	93	107	38
39	42	56	70	84	98	112	39
40	45	60	75	90	105	120	40
41	48	64	79	95	111	127	41
42	50	67	84	101	117	134	42
43	52	70	87	105	122	140	43
44	56	74	93	111	129	148	44
45	57	76	95	114	133	152	45
46	59	79	99	119	139	159	46
47	62	83	104	124	145	166	47
48	65	86	108	130	151	173	48
49	67	90	112	135	157	180	49
50	70	94	117	140	164	187	50
51	73	97	122	146	170	195	51
52	76	101	127	152	177	202	52
53	79	105	132	158	184	210	53
54	82	109	137	164	191	218	54
55	85	113	142	170	198	227	55
56	88	118	147	176	206	235	56

SCALING.

SCRIBNER LOG RULE—Continued.

Diameter.	Length—Feet.						Diameter.
	6	8	10	12	14	16	
Inches.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Inches.
57	91	122	152	183	213	244	57
58	95	126	158	189	221	252	58
59	98	131	163	196	229	261	59
60	101	135	169	203	237	270	60
61	105	140	175	210	245	280	61
62	108	145	181	217	253	289	62
63	112	149	187	224	261	299	63
64	116	154	193	232	270	309	64
65	119	159	199	239	279	319	65
66	123	164	206	247	288	329	66
67	127	170	212	254	297	339	67
68	131	175	219	262	306	350	68
69	135	180	226	271	316	361	69
70	139	186	232	279	325	372	70
71	144	192	240	287	335	383	71
72	148	197	247	296	345	395	72
73	152	203	254	305	356	406	73
74	157	209	261	314	366	418	74
75	161	215	269	323	377	430	75
76	166	221	277	332	387	443	76
77	171	228	285	341	398	455	77
78	176	234	293	351	410	468	78
79	180	240	301	361	421	481	79
80	185	247	309	371	432	494	80
81	190	254	317	381	444	508	81
82	195	261	326	391	456	521	82
83	201	268	335	401	468	535	83
84	206	275	343	412	481	549	84
85	210	281	351	421	491	561	85
86	215	287	359	431	503	575	86
87	221	295	368	442	516	589	87
88	226	301	377	452	527	603	88
89	231	308	385	462	539	616	89
90	236	315	395	472	551	629	90

SCRIBNER LOG RULE—Continued.

Diameter.	Length—Feet.						Diameter.
	6	8	10	12	14	16	
Inches.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Inches.
91	241	322	402	483	563	644	91
92	246	329	411	493	575	657	92
93	251	335	419	503	587	671	93
94	257	343	428	514	600	685	94
95	262	350	437	525	612	700	95
96	268	357	446	536	625	715	96
97	273	364	455	546	637	728	97
98	278	371	464	557	650	743	98
99	284	379	473	568	663	757	99
100	289	386	482	579	675	772	100
101	295	393	492	590	688	787	101
102	301	401	502	602	702	803	102
103	307	409	512	614	716	819	103
104	313	417	522	626	730	835	104
105	319	425	532	638	744	851	105
106	325	433	542	650	758	867	106
107	331	442	553	663	773	884	107
108	337	450	563	675	788	900	108
109	344	459	573	688	803	917	109
110	350	467	583	700	817	933	110
111	356	475	594	713	832	951	111
112	362	483	604	725	846	967	112
113	369	492	615	738	861	984	113
114	375	501	626	751	876	1,001	114
115	382	509	637	764	891	1,019	115
116	389	519	648	778	908	1,037	116
117	396	528	660	792	924	1,056	117
118	403	537	672	806	940	1,075	118
119	410	547	683	820	957	1,093	119
120	417	556	695	834	973	1,112	120

REPORTS OF TIMBER CUT.

When a cutting area is laid off and timber marked or otherwise designated to be cut, the forest officer in charge of the work will notify the supervisor that this has been done, and will also report the date when cutting actually begins. While cutting is in progress he will report to the supervisor, in all classes of sales, upon the form provided, the amount of timber cut and the condition of the tract.

Reports will cover periods of one, two, three, or four weeks, as may be required by the supervisor. The period will in every case end with Saturday. These reports may be omitted when the work is discontinued for a considerable period, as in winter.

The reports will be made out and sent to the supervisor in duplicate. One copy will be kept in the files of the supervisor; the other will be sent by the supervisor to the Forester.

In very large sales, where a scaler is regularly employed, an abstract of the scale book, on the form provided, will be sent to the supervisor in addition to the regular report. This abstract will be sent at the end of each week by the scaler in charge. The supervisor will send an approved copy of the abstract to the purchaser. When the amount cut, as shown by the reports, reaches that covered by the first payment, whether a partial payment or in full, the supervisor will so notify the Forester upon the form provided. This statement will be independent of any possible further payment, even though a second deposit may be made before the timber covered by the first is cut. Every sale contract provides for a system of separate advance payments, either one or more. The Washington office wishes to know when the purchaser has received the amount of timber covered by each.

When all the timber has been removed and the cutting area cleaned up satisfactorily the supervisor should notify the Forester, with a recommendation that the sale be closed.

TIMBER SETTLEMENTS.

REG. 27. When a right of way or other special privilege is granted within a forest reserve, the Forester may, in his discretion, without advertisement, fix the price and

require payment for all timber cut or destroyed on forest reserve land occupied in direct connection with the enjoyment of the privilege.

Such transactions are designated as timber settlements, and the forest officer, when reporting upon the special privilege, must submit a separate report on Form 578 to cover the timber to be cut or destroyed.

REG. 28. Forest supervisors are authorized to make timber settlements in all special-privilege cases granted by them.

There is no separate form of application or agreement for timber settlements. The special-privilege agreement (Form 832) must contain stipulations governing payments for the timber, disposal of refuse, etc.

The timber-sale regulations and instructions, which govern scaling, submission of cutting reports, disposal of refuse, and payments, will apply to timber-settlement cases, and forest officers must know and enforce the conditions of each timber settlement.

ADMINISTRATIVE USE.

REG. 29. The Forester may, with as little expense to the Government as possible, dispose of any diseased, insect-infested, or fire-killed timber upon forest reserves, by sale or otherwise, when such disposition is actually necessary to protect the forests thereon from further ravages or destruction.

This method will be adopted only when the regular timber sale and free-use regulations will not avail to remove an actual menace from the reserve, either because of delay for advertising or other reasons.

When a supervisor discovers that the existence of such timber is endangering the forest reserve, he should report to the Forester at once and suggest the readiest and most economical means of removing the danger. This may involve actual lumbering opera-

tions and burning of débris at Government expense, or a gift of timber to recompense those removing it, or such reduction in the usual stumpage prices as may be found absolutely necessary. Only in cases of the greatest emergency, however, will the Forester authorize such operations at actual expense to the Government.

REG. 30. When the destruction or use of forest reserve products or resources will result in benefit to the Government through actual protection or improvement of a reserve, the Forester, with the approval of the Secretary, may, without charge, allow such destruction or use even by parties not otherwise entitled to a regular "Free Use" permit.

SPECIAL PRIVILEGES.

I. UNDER JURISDICTION OF THE DEPARTMENT OF AGRICULTURE.

REG. 31. The Forester may issue permits for special privileges within forest reserves, with such restriction as to area, time, terms, and surety as he may deem best, and he may, in his discretion, extend, renew, or revoke any such permit.

Applications for all special privileges should be prepared upon Form 832, and each application should cover one privilege only.

If the privilege sought is one that can be granted by supervisors (Regulations 35, 41, and 43) the applicant should sign and submit his application in triplicate; and if the supervisor decides to issue the permit as applied for he will approve and sign all three, send one to the permittee, retain one in his office, and send the third to the Forester, stamped: "Duplicate, for the information of the Forester." If the signed application, as received by the supervisor, must be modified before being approved, he will prepare three revised copies and return them for signature by the applicant.

If the privilege is to be acted upon by the Forester, one copy of the application will suffice; but before mailing it to the Forester

the supervisor should file a card with the proper case designation thereon in his card record case. The application should be accompanied by report on Form 964, and if any forest reserve timber located upon the land or right of way applied for will be cut or destroyed in connection with the enjoyment of the privilege, a separate description and estimate of that timber upon Form 578 must also be made. If the application is for a right of way to promote a commercial enterprise there must also be submitted by the applicant certified evidence of water rights secured under local laws (when the use of water is involved), and field notes and two copies of a map on tracing linen showing the proposed right of way as surveyed, both map and notes bearing the surveyor's certificate. When a privilege is not to promote a commercial enterprise, a sketch map of the land involved, made or approved by a forest officer, is sufficient and should accompany the application.

A commercial enterprise is one entered into with the main object of furnishing its product to the public for a money return. For example, a telephone line constructed for the purpose of charging toll is commercial, but one maintained by a mining company for its own exclusive use is not commercial; or a flume line to develop electrical power to be sold to the public is commercial, but one maintained by a mining company to develop power for its own use is not commercial.

If the privilege applied for is allowed, the Forester will have prepared an agreement in triplicate, which will be sent to the supervisor, one copy for his files, the other two copies to be forwarded to the applicant for execution. No agreement will be approved by the Forester until duly executed by the applicant, and applicants should be informed that enjoyment of any privilege must be deferred until definite notice from the supervisor. The supervisor should, at the time of sending agreements to applicants for execution, inform them that to avoid delay they may begin enjoyment of the privilege applied for immediately after mailing any required payments to the Special Fiscal Agent and

returning to the supervisor the agreement properly executed in duplicate.

As soon as the applicant executes the agreement in duplicate and returns it to the supervisor, both copies must be mailed at once to the Forester for approval. When the supervisor receives a certificate of deposit from the Special Fiscal Agent (p. 29) in a privilege case in which a charge is made, he will hold it until he also receives the approved agreement from the Forester (or, if such agreement is received first, until the certificate of deposit is received), and mail both together to the permittee, the approved agreement to act as a full permit.

PAYMENT FOR SPECIAL PRIVILEGES.

The charge for permits is based principally upon the value of that which is actually furnished to the permittee by the Forest Service, including advantageous location and other indirect benefits, and not directly upon the profits or the magnitude of the business which is to be carried on. Applicants should not send any payments to the Special Fiscal Agent until notified of the approval of their applications.

Whenever a privilege involving a charge is granted by the Forester a prepared copy of Form 861, ready for the signature of the supervisor, will be sent with the agreement; and this must be furnished to the applicant to accompany his remittance to the Special Fiscal Agent (Reg. 7). When Form 861 is prepared in the Forester's office, a duplicate need not be furnished the Forester by the supervisor (p. 29). As a rule full payment in advance for special privileges will be insisted upon; but when great hardship would result the annual payment may in the discretion of the Forester be made in not to exceed three equal installments. After the first payment for a special privilege has been made, the Forester will, one month before

any subsequent payment falls due, send to the permittee through the supervisor a notice to make payment.

DURATION AND REVOCATION OF SPECIAL-PRIVILEGE PERMITS.

Forest supervisors in issuing permits should always make them "terminable at the discretion of the Forester" and not for any definite period. No permits may be revoked by the supervisor, and when the Forester takes such action the supervisor will be notified so that he may make the proper record.

ABANDONMENT AND REVOCATION OF PRIVILEGES.

Whenever a permittee abandons a privilege the supervisor should immediately, after assuring himself of this fact, report it to the Forester and designate the case "closed" on his privilege-card record. If an applicant does not execute and return an agreement within a reasonable time, the supervisor should make inquiry, and if he refuses to execute the papers, the supervisor should secure possession of and return them to the Forester with his report in the case.

REG. 32. Occupancy under permit secures no right or claim against the United States, either to the land or to any improvements upon it, beyond the privileges conferred by the permit. Improvements made by the permittee, except fences, may not be removed except with the written consent of the supervisor.

SPECULATIVE APPLICATIONS.

The policy of the Forest Service is to prevent applicants from securing and holding valuable privileges as a speculative venture, awaiting either the development of the country to make the privileges more valuable, or until financial assistance to carry them out can be secured. To avoid this speculative feature applicants

must, before permit is issued, make all required payments and agree that any necessary construction work will commence within some definitely stated reasonable time, that the work will be completed within a certain period, and that the privilege will be beneficially enjoyed for at least a certain stated period each year. Such time is to be reckoned from the date of execution of the agreement by the applicant. Forest officers should, therefore, in recommending the time for commencement and completion of privilege projects, take into consideration the physical conditions, such as climate, facilities for transportation, availability of laborers and materials, etc.

After any permit has been granted, the forest officer should carefully note whether the time limitations for beginning and completing construction and enjoying the privileges are observed by the permittee. They should promptly inform the Forester of any breach of the agreement in these particulars, and unless permittees can show good reason for failure to comply with their agreements the permits will be revoked.

• HOTELS, STORES, MILLS, ETC.

REG. 33. Hotels, stores, mills, apiaries, limekilns, residences, and similar establishments will be permitted upon forest reserve lands wherever the demand is legitimate and consistent with forest reserve interests.

The use of tracts of not to exceed 2 acres for a school and 1 acre for a church is specifically provided for by law, subject to regulation by the Department and any other disposition of the land by the Government. (Appendix, p. 160.) Timber for the construction of church and school buildings may be secured under the free use regulations. (Reg. 10.)

AGRICULTURAL LAND.

REG. 34. Permits to inclose and cultivate agricultural land within forest reserves may be granted by the Forester subject to the foregoing conditions, except that no single applicant will be permitted to occupy more than 160 acres.

Forest reserve land chiefly valuable for agriculture held by permit under this regulation may be listed (p. 23) and thus opened to settlement under the act of June 11, 1906 (Appendix, p. 175), but unless the permittee is the preferred applicant under that act, such listing will be temporarily deferred to protect growing crops.

ROADS AND TRAILS.

REG. 35. Wagon roads and trails may be constructed, changed, widened, extended, or repaired upon forest reserve lands when needed, but permit must first be secured. Permits will not give any right to exclusive use, or to charge toll, or against future disposal of the land by the United States.

If an application for road or trail construction involves the cutting or destruction of more than \$100 worth of reserve timber within the right of way, it must be submitted to the Forester for approval; otherwise it may be granted by the supervisor.

REG. 36. The supervisor may, in his discretion, grant during any one year to any road district, county, person, or noncommercial corporation the right to use not more than \$100 worth of timber free for the construction, maintenance, or repair of roads or trails within forest reserves, without prejudice to any free use application

they may make in the same year for material for other purposes.

The regular free use permit form must be used in granting timber under this regulation.

REG. 37. Applicants for wagon road or trail construction who are not entitled to the free use privilege must pay, except as provided for in Reg. 30, for all merchantable timber cut or destroyed within the right of way under Timber Settlement Regulations; or, if reserve timber outside the right of way is required for construction or repair, under Timber Sale Regulations.

REG. 38. A county road established prior to the creation of the reserve may be changed, widened, or repaired by the county authorities without permit if the operations are within the right of way fixed for such roads by the State law.

Any attempt to abuse this privilege, such as the unnecessary use of material or the leaving of dangerous refuse, should be forbidden, and, if necessary, reported to the Forester for instructions.

REG. 39. In serious emergencies, supervisors of road districts or others may make any necessary immediate repairs and for such purpose may take from reserve lands the necessary timber, providing they secure a permit for any timber so used under the provisions of Reg. 36 or 37, as the case may require, at their earliest opportunity.

CANALS, DITCHES, RESERVOIRS, ETC.

REG. 40. Permits for canals, ditches, flumes, pipe lines, tunnels, dams, tanks, and reservoirs, not granting an easement, are under the jurisdiction of the Secretary of

Agriculture, and should be applied for to the supervisor on Form 832.

The granting of such rights of way carries with it a right to use only so much land as may be necessary for the enjoyment of the privilege.

REG. 41. If the project is small and of a private and personal character, and there are no complications of title, nor prior and conflicting rights, the supervisor may grant the permit, provided not more than \$100 worth of timber will be cut or destroyed within the right of way. If any large or commercial enterprise is involved, or if there is any question of conflicting rights or jurisdiction, the supervisor must transmit the application to the Forester for approval, together with report and recommendation.

Small projects are such as a reservoir covering not to exceed 10 acres or a ditch, flume, pipe line, canal, or tunnel not to exceed 2 miles in length to supply a few farms, or a tank to collect water for stock.

Permits granted under these regulations are only for the improvements necessary to store or conduct water and do not carry any right to the water itself, the appropriation of which is subject to Federal, State, or Territorial law.

PRIVATE RAILROADS, TELEPHONE LINES, ETC.

REG. 42. Permits for private railroads and tramroads and telegraph, telephone, and power transmission lines may be granted by the Forester only.

Application must be made to the supervisor on Form 832. Telephone, telegraph, or transmission lines may be constructed with proper local authority within county road rights of way without permit from the Forester.

WILD HAY.

REG. 43. Wild grass upon forest reserves may be cut for hay under permits issued by supervisors. A reasonable charge per acre may be made, to be fixed by the supervisor under general instructions from the Forester. Application should be made upon Form 832 to the supervisor, directly or through a ranger, stating the area of the tract desired and the price offered.

Supervisors anticipating business of this kind should report to the Forester and suggest a price per acre for his approval. Under instruction then received they will issue permits, following the general instructions governing special-privilege cases. They will not permit cutting until they have assurance that the purchase price has been forwarded to the Special Fiscal Agent.

In issuing permits to cut hay preference should be given those applicants who actually need the hay for their own use rather than to those who contemplate selling it to others.

HISTORIC AND SCIENTIFIC MONUMENTS.

All persons are prohibited from appropriating, excavating, injuring, or destroying any historic or prehistoric ruin or monument, or any object of antiquity situated on lands owned or controlled by the Government of the United States, without the permission of the Secretary who has jurisdiction over the land involved. The penalty is a fine of not more than \$500 or imprisonment for not more than ninety days, or both. The law provides that the Secretaries of the Interior, Agriculture, and War shall make uniform rules for granting permits when proper for the study, examination, and use of such monuments and antiquities. (Appendix, p. 178.)

Forest officers should report to the Forester the location and description of all objects of great scientific

or historic interest which they find upon forest reserves, and should prevent all persons from injuring these objects without permission from the Secretary of Agriculture. After the Secretary of Agriculture has determined any monument or object of historic or prehistoric interest, or after the President has proclaimed "historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest," upon a forest reserve, to be national monuments, forest officers may arrest unpermitted persons who are found appropriating, excavating, injuring, or destroying any such objects. (Appendix, p. 178.)

II. UNDER JURISDICTION OF THE DEPARTMENT OF THE INTERIOR.

REG. 44. Whenever a right of way under the jurisdiction of the Secretary of the Interior is located upon a forest reserve, the Forester may, in his discretion, before making recommendation that it be granted, require the applicant to execute such stipulation and bond as he may deem necessary for the protection of forest reserve interests. (Appendix, p. 195.)

Such stipulations may include clearing right of way; disposal of refuse; payment, under timber settlement regulations, for all merchantable timber cut or destroyed; necessary precautions against fires by the use of oil as fuel, etc.; and any other conditions needed to protect forest reserve interests.

Applications for rights of way under the jurisdiction of the Secretary of the Interior must be filed in the local land office. Forest officers must not receive or

transmit applications of this character. All such applications when regularly received at the Interior Department will, however, be referred to the Forest Service for report as to whether granting them will injuriously affect forest reserve interests, and forest officers will make reports upon such applications when directed to do so by the Forester.

GRAZING.

The Secretary of Agriculture has authority to permit, regulate, or prohibit grazing in the forest reserves. Under his direction the Forest Service will allow the use of the forage crop of the reserves as fully as the proper care and protection of the forests and the water supply permit. In new forest reserves, where the live-stock industry is of special importance, full grazing privileges will be given at first, and if reduction in number is afterwards found necessary stockmen will be given ample opportunity to adjust their business to the new conditions. Every effort will be made to assist the stock owners to a satisfactory distribution of stock on the range in order to secure greater harmony among citizens, to reduce the waste of forage by tramping in unnecessary movement of stock, and to obtain a more permanent, judicious, and profitable use of the range.

The leading objects of the grazing regulations are:

- (a) The protection and conservative use of all forest reserve land adapted for grazing.
- (b) The best permanent good of the live-stock industry through proper care and improvement of the grazing lands.

(c) The protection of the settler and home builder against unfair competition in the use of the range.

On the other hand, the Forest Service expects the full and earnest cooperation of the stock owners to carry out the regulations.

Permits will be issued to graze a certain number of live stock in each reserve or part of a reserve, so long as no marked damage is done by such stock; but whenever a reserve is being injured by too much stock, or by the way it is being handled, the number will be reduced until the damage is stopped. In extreme cases, if necessary, all stock will be excluded.

Cattle and horses will usually be allowed to graze in all reserves. Sheep and goats will be allowed to graze in reserves or in parts of reserves where special conditions warrant such privileges, but will be restricted to the areas and grazing periods fixed by the forest officers.

Permits will usually be granted for one year, but where all controversies have been settled and only a proper number of stock are allowed, permits may be granted for more than one year, if conditions are favorable.

STOCK EXEMPTED FROM FEE.

REG. 45. All persons must secure permits before grazing any stock in a forest reserve, except the few head in actual use by prospectors, campers, and travelers, and milch or work animals not exceeding a total of six head owned by bona fide settlers residing in or near a forest reserve, which are excepted and require no permit.

No stock may be grazed without a permit except milch or work animals. A settler owning only six head or less of stock which are neither milch nor work animals will be required to apply for

permit and pay the grazing fee as for a larger number, while a settler owning any number of stock will be allowed to graze six head of milch or work animals without permit and free of charge.

Rangers will report the approximate number of stock entitled to graze without permit in each district, in order that the supervisor may consider it in his recommendation for grazing. This class of stock will not be counted against the number which is allowed to graze under permit.

ALLOTMENT OF PRIVILEGES.

REG. 46. The Secretary of Agriculture will prescribe each year the number of stock to be allowed in each reserve. The period during which grazing will be allowed will be determined by the Forester. The supervisor will issue grazing permits in accordance with the instructions of the Forester.

The grazing season for which permits are issued must not exceed the period authorized, and the total number of stock included in all permits issued must not exceed the number allowed by the Secretary's order.

The period covered by year-long permits will begin at the opening of the regular summer grazing season and end on the day previous of the following year.

Applicants for grazing permits will be given preference in the following order:

(a) Small near-by owners.

Persons living in or close to the reserve whose stock have regularly grazed upon the reserve range and who are dependent upon its use.

(b) All other regular occupants of the reserve range.

After class (a) applicants have been provided for, the larger near-by owners will be considered, but limited to a number which will not exclude regular occupants whose stock belong or are wintered at a greater distance from the reserve.

(c) Owners of transient stock.

The owners of stock which belong at a considerable distance from the reserve and have not regularly occupied the reserve range.

Priority in the occupancy and use of the range and the ownership of improved farming land in or near the reserves will be considered, and the preference will be given to those who have continuously used the range for the longest period.

The applications of new settlers owning small bands of stock will be considered in all cases except where the range is fully occupied by small owners.

The number of stock allowed an applicant will be determined upon the merits of each case.

Whenever it is found necessary to reduce the number of stock allowed in any reserve or portion of a reserve, the small owners of stock are first provided for; the reduction is then made on the number allowed the larger owners on the basis of a sliding scale suited to the conditions in each case. Class (c) stock will be excluded before the other classes are reduced.

When necessary for the protection of small owners, a limit in the number of each class of stock will be established, and renewals to all persons whose permits are within such limit will be without reduction in the number of stock. Persons owning a less number of stock than the established limit will be allowed to increase their permit number gradually, but may be restricted in the number added each year.

When necessary to prevent range monopoly, a maximum limit in the number of stock allowed any one applicant will be established, and no permit will be issued for a number in excess of such limit.

The owners of stock which belong in the State or Territory in which a forest reserve is located will be given the preference, and resident owners will be considered first, but owners of stock coming from adjoining States or Territories will also be considered when circumstances warrant it.

APPLICATIONS FOR PERMITS.

REG. 47. The supervisor will set and give public notice of a date each year on or before which all applications for grazing permits must be presented to him. Permits will be refused to persons who do not file their applications

within the required limit, unless satisfactory reasons are given.

In setting the date on or before which applications for grazing permits must be presented, ample time will be given to insure all persons who are entitled to share in the privilege an opportunity to file their applications.

In case the total number of any kind of stock applied for before the date which has been set does not equal the number allotted to the reserve, applications received subsequently may be approved until the total allotment has been reached.

REG. 48. Grazing applications must not cover more stock than the applicant desires to graze in the reserve, and must show the marks and brands of the stock, the portion of the reserve or district in which pasture is desired, and the grazing period.

Applications will be divided into two classes, cattle and horses, and sheep and goats, and will be numbered separately. The cattle and horse grazing applications will begin each season with No. 1, and the sheep and goat applications with a number such as 301, 501, etc., which will be above the highest number given any cattle and horse grazing application for the same reserve.

Amended applications and permits allowing an increase or decrease in the number of stock to be grazed will be given the same number as the original.

Applications which are disapproved will not be included in the numbered series.

Upon approval of a grazing application the supervisor will immediately notify the applicant of the action taken, stating the number of stock allowed and the amount to be paid for grazing fees. A duplicate copy of each notice of approval will be sent to the Forester at once.

Whenever a grazing application is disapproved the supervisor will at once notify the applicant to that effect by letter, giving the reason for such action, and also send a copy of the letter to the Forester.

Whenever the supervisor desires such information, applicants may be required to file a supplemental certificate setting forth the location and area of their ranches and also of the public lands used for grazing, the number and class of stock owned, and the length of time they have occupied the range.

REG. 49. Whenever there is a dispute between applicants for the privilege of grazing stock on the same area or district, if the supervisor is unable otherwise to determine who is best entitled to a permit, he will notify the applicants to appear before him at a stated time and place, then and there to make a statement of their claims. After all evidence has been presented the supervisor will decide who shall be granted permits, and his decision will be final unless written notice of appeal to the Forester is given him within ten days thereafter. Appeal will avail only in case of error.

REG. 50. Persons owning cattle and horses which regularly graze on ranges located along the boundary line and only partially included within a forest reserve may be granted permits for such portion of their stock as the circumstances appear to justify, but may be required to herd or so handle their stock as to prevent trespassing by that portion for which a permit is not granted, and to sign a supplemental agreement to that effect.

In the approval of applications from the owners of stock which graze on and off the reserve, the forest officers will make an estimate of the average number which will probably be grazed upon the forest reserve lands, and the supplemental agreement to prevent the grazing of unpermitted stock need not be required unless this number is in excess of that which the applicant would be entitled to graze and is willing to pay the grazing fee upon.

Persons who allow their stock to drift and graze on the forest reserves without a permit, whether they do so intentionally or

otherwise, will be regarded as trespassers, and will lose all right to privileges of any kind under sale or permit upon forest reserves.

Any person who without a permit intentionally drives stock not under permit or allows it to drift on a forest reserve will be liable to prosecution for trespass and suit for damages.

FEES AND PERMITS.

REG. 51. A reasonable fee will be charged for grazing all classes of live stock on forest reserves. The minimum price will be as follows, depending upon the advantages and locality of the reserve: From twenty (20) to thirty-five (35) cents per head for cattle and horses for the summer grazing season, and from thirty-five (35) to fifty (50) cents per head for the entire year; from five (5) to eight (8) cents per head for sheep for the summer grazing season; and from eight (8) to ten (10) cents per head for goats for the summer season. An extra charge of two (2) cents per head will be made for sheep or goats which are allowed to enter the forest reserves for the purpose of lambing or kidding. All stock six months old and over, at the time of entering, will be counted as grown stock.

These prices will be gradually advanced as the market conditions, transportation facilities, and demand for reserve range warrant it, but the grazing fee charged will in all cases be reasonable and in accordance with the advantages of the locality.

In calculating the number for which permit will be required and the amount to be paid for grazing cattle and horses no count will be made of calves or colts under six months of age at the time of entering, or for those born during the year for which permit is granted. The intent is that calves and colts born during any calendar year shall be counted and charged for during the following year.

In counting sheep and goats the percentage basis system heretofore in use will be abandoned, and hereafter no count will be

made of lambs or kids under six months old at the time of entering, but the fees will be increased sufficiently to cover the young stock. The number of sheep and goats allowed upon a reserve or for which a permit is granted will be calculated on a flat-rate basis, counting only stock six months old and over.

REG. 52. All grazing fees are payable for each year strictly in advance. When an applicant for a grazing permit is notified by the supervisor that his application has been approved, he will remit the amount due for grazing fees to the Special Fiscal Agent, Forest Service, Washington, D. C., within thirty days from the date of the notice, and upon return of the receipt to the supervisor a permit will be issued allowing the stock to enter the reserve and remain during the period specified.

Whenever the date of approval is more than sixty days previous to the opening of the grazing period for which an application has been approved, the grazing privilege will be reserved upon payment of 20 per cent of the grazing fee within thirty days from the date of approval; and provided the balance is paid at least thirty days previous to the opening of the grazing period the permit will be issued. No permit will be issued until payment in full has been made.

Persons who fail to pay the grazing fee within the required limit must notify the supervisor and give satisfactory reasons, or they may be denied the grazing privilege the following season.

When payment of a fee is required by the Forester the forest officer will furnish the applicant with a printed letter of transmittal, which must accompany the remittance to the Special Fiscal Agent. (Reg. 7.)

When the Special Fiscal Agent's certificate is received, showing that payment in full has been made, the permit will be issued.

Each permit will be given the same number as the application upon which it is based, and a duplicate copy will be sent to the Forester at once.

Whenever payment in excess of the amount due is made, the amount overpaid will be refunded upon receipt of the duplicate permit by the Forester. (Refunds, p. 30.)

REG. 53. The fees paid on account of a grazing permit which has been duly issued will not be refunded for non-use of the permit, except when, in the opinion of the Forester, the applicant is prevented from using the range by circumstances over which he has no control.

Refunds will not be made on account of the stock having been sold after the issuance of the permit.

Applications for the refund of money paid on account of a grazing permit must be accompanied by a written statement giving the reasons for not using the permit. Upon receipt of such application and statement by the supervisor he will forward it to the Forester, with a recommendation for its approval or rejection. The Forester will decide whether or not the refund will be made.

REG. 54. Permits will be granted only for the exclusive use and benefit of the owners of the stock and will be forfeited if sold or transferred in any manner or for any consideration. Speculation in the use of grazing permits will not be allowed, and permits will be refused or canceled for intentional false statement of the number of stock owned.

In case a permittee shall sell the stock covered by permit to a purchaser who wishes to continue grazing it on the forest reserve, upon presentation to the supervisor of evidence that the sale is bona fide the permit will be canceled and a new permit numbered in the regular serial order issued to the purchaser, without cost, for the remainder of the grazing period allowed in the original permit. The transfer of a permit does not carry with it any guarantee that a renewal will be allowed for the number of

stock the original permittee might have been entitled to graze, but is granted with the understanding that the purchaser will be considered solely upon the merits of his case in subsequent permit allotments.

REG. 55. When an owner who has a permit is ready to drive in his stock he must notify the supervisor, by mail or otherwise, stating the number to be driven in; he must also notify the supervisor when the stock is removed from the reserve. If called upon to do so, he must provide for having his stock counted before entering the reserve, or at any time afterwards when the number of stock appears to be greater than the number covered by permit. Whenever any stock is removed before the expiration of the permit, it can be replaced by other stock to fill out the number covered by permit if the nearest forest officer is notified of such action at once.

DISTRICTS AND DIVISIONS.

REG. 56. Reserves in which grazing is allowed will be divided into districts approved by the Forester, and such range divisions made among applicants for the grazing privilege as appear most equitable and for the best interest of the reserve. When required for the protection of camping places, lakes and streams, roads and trails, etc., or of areas which are to be reforested, stock will be excluded from specified areas for such period of time as is necessary.

At the end of each season the supervisor will go over the grazing grounds without delay and examine the effect of grazing on the reserve. He will make a full report to the Forester, with recommendations as to the number of stock to be allowed the following year, the division of the range into districts, and the areas to be opened or closed to grazing. In making estimates of

the grazing capacity of lands only stock six months old and over will be counted, but with the understanding that the natural increase will also be grazed.

RESTRICTIONS IN HANDLING STOCK.

REG. 57. Each person or group of persons granted grazing privileges will be required to repair all damage to roads or trails caused by the presence of their stock in any portion of a reserve, and to build any new roads or trails found necessary for the proper handling of the stock. They will also be required to fence any spring or seep which is being damaged by tramping, and, if necessary, pipe the water into troughs for watering stock. Such troughs must be open for public use.

REG. 58. Sheep must not be bedded more than six nights in succession in the same place, except when bedding bands of ewes during lambing season, and must not be bedded within 300 yards of any running stream or living spring, except in rare cases where this restriction is clearly impracticable.

REG. 59. The carcasses of all animals which die in the close vicinity of any water must be immediately removed and buried or burned.

REG. 60. All stock grazed under permit must be salted regularly at such places as are designated by the forest officers, and the owners of stock must notify the forest officers when any such order has been complied with.

REG. 61. All persons holding grazing permits are required to extinguish camp fires started by them or their employees before leaving the vicinity thereof, and to aid in extinguishing all forest fires within the division or district of the reserve in which they are grazing stock.

REG. 62. Whenever an injury is being done the reserve by reason of improper handling of the stock, the owner must comply with the orders of the forest officers or the permit will be canceled and the stock removed from the reserve.

USE OF PRIVATE LAND.

REG. 63 (formerly Reg. 22). Persons who own, or who have leased from the owners, land within any reserve which they desire to use for grazing purposes will be allowed to cross the reserve lands with their stock to reach such private holdings, but when the stock will be grazed on reserve land en route, they must make application to the supervisor for the privilege of crossing. The application must be accompanied by a personal certificate of title showing the description and ownership of the land, and, if leased from an owner, a copy of the lease, and must state the number of stock to be taken in, the length of time required to cross the reserve land, the route over which the stock is to be driven, the period during which the stock will remain upon the private land, and how much stock the owned or leased land will pasture during the period specified.

When the private land is unfenced a special clause may be inserted in the agreement waiving the right to the exclusive use of the private land and allowing it to remain open to other stock grazed under permit, in consideration of which a permit will be issued free of charge allowing the stock to be grazed at large upon the forest reserve, but the grazing fee must be paid on all stock over the estimated grazing capacity of the private lands.

When any such application is made to the supervisor he will examine it, and if he finds it reasonable and just and

made in good faith for the purpose of utilizing such private holdings only he will approve it and forward it, accompanied by all papers supporting it, to the Forester. After the Forester approves the application due notice will be given the supervisor, who may then issue a permit allowing the stock to enter.

The determination of all questions involving the title of land is within the jurisdiction of the Secretary of the Interior, and therefore it is necessary to ascertain from the records of the General Land Office that the title to the land claimed has passed from the United States before the rights of the claimant can be recognized.

The privilege of grazing sheep and goats at large upon forest reserve lands, in consideration of waiving the right to the exclusive use of private lands, will be allowed only upon such reserves or portions of reserves as are open to this kind of stock.

Persons grazing stock under this regulation who fail to make the special agreement allowing other stock to enter upon the land will be required to keep their stock within the limits of the land under their control either by herding or fencing.

CROSSING PERMITS.

REG. 64. Persons wishing to drive stock across any part of a forest reserve must make application to the supervisor, either by letter or on the regular grazing application form, for the privilege of grazing the stock on the reserve en route, and must have a permit from the supervisor before entering the reserve. The application must state the number of stock to be driven across the reserve, the date of starting, and period required for passage. Grazing must be confined to the limits and along the route designated by the supervisor, and will only be allowed for the period actually necessary for stock to cross the reserve.

Permits will not be required for driving small bands of stock along public highways, or when the stock will not be grazed upon forest reserve lands en route.

Whenever it appears necessary for stock to cross regularly any portion of a forest reserve in which grazing is prohibited, the supervisor will make a full report of the facts, with a description of the regular route traveled, the width of driveway necessary to allow the proper grazing of stock across the reserve, the number and class of stock which will probably cross, and the number of days required for crossing the portion of the reserve referred to. Upon receipt of such report by the Forester, if the circumstances warrant such action, a regular driveway will be established and the privileges to be granted will be defined.

If occasion demands, forest rangers will be detailed by the supervisor to accompany the stock and see that there is no delay or trespassing.

No charge will be made for permits issued under Regulations 63 and 64. The regular form will be used and a copy of each permit will be sent to the Forester.

QUARANTINE AND LOCAL LAWS.

REG. 65. All stock which is grazed under permit in or allowed to cross any forest reserve will be required to conform to the quarantine regulations of the Bureau of Animal Industry, Department of Agriculture, and all live-stock laws of the State or Territory in which the reserve is located.

Whenever the stock in any locality is known to be infected with a contagious disease, or notice to that effect has been given the Forester by the Bureau of Animal Industry, the owners of all stock to be grazed in forest reserves must, if required to do so, submit the stock to inspection, and, if found necessary, have such stock dipped or otherwise treated before it is allowed to enter. At any time during the period for which a grazing permit has been issued, if the stock is found to be infected with a contagious disease, it must be dipped or otherwise treated in accordance with

the instructions of the inspectors, or the permit will be canceled and the stock removed from the reserve.

The owners of all stock grazed under permit must comply with the live-stock laws of the State or Territory, or their permits will be canceled. Rangers will report at once any violation of the live-stock laws, and will assist the stock owners to protect their property against loss by theft.

DRIFT FENCES AND INCLOSURES.

REG. 66. The construction and maintenance of drift or division fences will be allowed when they will be a benefit to the reserve or its administration and will not interfere with the use of the range by all who are equitably entitled to share in the grazing privilege.

A fence may be constructed or maintained if it does not give control of an area in excess of that actually required for pasturage of the stock which the person or persons maintaining it would be entitled to graze. If the range controlled by a fence is excessive in area, and should be shared by applicants other than those now using it, the fence must be either removed or changed, or the range opened to other permittees who are entitled to share in its use.

All drift or division fences must be provided with gates at such points as are necessary to allow proper ingress and egress.

This privilege is granted without charge other than the regular grazing fee.

REG. 67. The construction of corrals upon forest reserve lands covering an area of not more than one (1) acre, to be used in connection with the proper handling of live stock which is permitted to graze thereon, will be allowed whenever in the judgment of the forest officers such corrals are necessary and will not be detrimental to the proper care of the reserve. The construction of inclosures upon forest reserve lands containing not more than three hundred and twenty (320) acres will be allowed, when

such inclosures are necessary for the proper handling of the stock allowed to graze upon the reserves, as a special privilege, for which an annual rental of not less than four (4) cents per acre will be charged in addition to the regular grazing fee. The fencing up of watering places for the purpose of controlling adjoining range will not be allowed, and in fencing pastures provision must be made to allow free access to water by any stock grazing under permit. The application must state the exact location and area of the land to be inclosed, and must be accompanied by an agreement to pay the annual rental in advance and to comply with all forest reserve rules and regulations.

Under this regulation the construction and maintenance of pastures will be allowed for the following purposes:

To pasture saddle horses, milch or work animals, graded or thoroughbred breeding stock, and bulls or rams.

To pasture beef steers or stock cattle which are being gathered and held just previous to their removal from the reserve.

To give settlers who live upon lands either within or on the border of a reserve the exclusive use of adjoining pasture lands during a portion of the year, when needed for protection against other stock which is permitted to graze on the reserve.

In the approval of applications for the construction of inclosures upon forest reserve lands, only such area as is needed for the purpose mentioned will be allowed. An inclosure of 320 acres will not be allowed when a smaller area would be sufficient for the needs of the applicant.

The character of the land, whether ordinary grazing or meadow land, whether or not there is living water upon it, and the demand for the use of the land should be considered in fixing the price to be charged. An advance over the minimum charge will be made whenever the area applied for is largely meadow land or so located as to be in special demand for pasturing purposes. The minimum price is four (4) cents per acre in addition to the regular

grazing fee; but in no case will the privilege be allowed on a charge of less than two dollars (\$2) per annum.

When the area applied for includes land now bearing trees, the probable effect which grazing under this privilege would have upon reproduction of the forest should be reported.

The privileges granted under Regulations 66 and 67 confer no property rights other than ownership of the improvements constructed, and all such improvements must be removed within ninety days after the expiration of an agreement unless sold to a successor who is entitled to continue in their use. Otherwise they will become the property of the United States.

The agreement may be made to cover a period of from one to five years, provided it stipulates that failure to secure a renewal of the grazing permit, in connection with which it is granted, will cancel the agreement for the maintenance of the drift or division fence or pasture.

Upon receipt of an application by the supervisor he will forward it to the Forester, with a recommendation for its approval or rejection. If approved by the Forester the applicant will be notified through the supervisor, and upon payment to the Special Fiscal Agent, Washington, D. C., of the grazing fee or rental for the year, the construction or occupancy may begin.

BONDS.

REG. 68. Whenever it is necessary for the protection of a forest reserve, or of the interests dependent upon it, the supervisor may require the owners of transient stock or nonresidents of the State or Territory in which a reserve is located to give a good and sufficient bond to insure payment for all damage caused by any violation of the regulations or the terms of the permit.

In all cases where a bond is required the supervisor will prepare it, using the regular blank form, stating the number and kind of stock to be grazed and the portion of the range to be occupied, and send it to the applicant with the notice of approval of the application. The bond must be executed and returned to

the supervisor, who will note the names and addresses of the sureties and forward the bond to the Forester for approval. The permit will not be issued until the bond has been approved by the Forester and the grazing fees paid in full.

ADVISORY BOARDS.

REG. 69. Whenever any live-stock association whose membership includes a majority of the owners of any class of live stock using a forest reserve or portion thereof shall appoint a committee for such purpose, an agreement on the part of which committee shall be binding upon the association, such committee, upon application to the Forester, may be recognized as an advisory board for the association, and shall then be entitled to receive notice of proposed action and have an opportunity to be heard by the local forest officer in reference to increase or decrease in the number of stock to be allowed for any year, the division of the range between different classes of stock or their owners, or the adoption of special rules to meet local conditions.

In setting any date of meeting with an advisory board the supervisor must give sufficient time to afford all members of the board an opportunity to attend, but in case they fail to attend either in person or by proxy, then the forest officer will be relieved from all obligation to delay action.

Favorable consideration will be given the recommendations of an advisory board except when such recommendations are in conflict with the regulations or when there is good reason for their disapproval.

Live-stock associations desiring to take advantage of this regulation must file an application with the Forester, giving the names of all members of the association, the name of the forest reserve or reserves in which its members are interested, and the names of the committeemen who are to act for the association. The advisory board must not consist of more than five members, and a majority of the board must constitute a quorum.

The application must be accompanied by a copy of the constitution and by-laws of the association and a statement that the action of the board will be binding upon the association. Upon the approval of such application by the Forester, the association will be entitled to the recognition given under this regulation and will be notified promptly of any contemplated changes in the number of stock allowed on any reserve or district thereof, any division of the range between different classes of stock or its owners, or the adoption of any special rules to meet local conditions.

PROTECTION OF GAME AND STOCK.

REG. 70. All forest officers will cooperate with State or Territorial officials, so far as they can without undue interference with their regular reserve work, to enforce local laws for the protection of game and stock. When authorized to do so by the proper State officers they will, without additional pay, act as game wardens and stock inspectors with full power to enforce the local laws. If not so authorized they will promptly inform the State officials of all violations discovered. (Appendix, p. 162.)

Rangers should when necessary inform all persons of the local stock and game laws and endeavor to prevent their violation. This can best be done by courtesy and tact. If actual violation of the law is discovered by the ranger, he will at once notify the proper State officer, if practicable, and report this action to the supervisor. If unable to communicate with the State officer, or if no action follows, he will give the facts to the supervisor, who will transmit them to the proper State authority.

All supervisors will communicate at once with the State or Territorial game warden and request appointment for themselves and all the rangers under their supervision as deputy State game wardens. This appointment is sufficient warrant to arrest for offenses against the State or Territorial game laws.

REG. 71. Where trapping for fur on a reserve is legal, trappers must obey all regulations and must get timber

for cabins through free use permits. If over six months' occupancy is desired a special privilege permit must be secured.

Whenever it is found that the stock interests are suffering or that the number of game animals or birds is on the decrease on account of wolves, cougars, coyotes, bobcats, or other predatory animals, the Forester should be notified in order that steps may be taken to get rid of them.

TRESPASS.

I. CRIMINAL ACTION.

REG. 72. Under authority given to the Secretary of Agriculture regarding forest reserves "to regulate their occupancy and use and to preserve the forests thereon from destruction," the following acts are hereby forbidden, and declared to constitute trespass punishable by fine and imprisonment. (Appendix, p. 158.)

(a) Grazing upon or driving across a forest reserve any live stock without a permit, except as otherwise allowed by regulation.

(b) Placing any fence or inclosure upon a forest reserve without a permit, except upon patented land or upon a valid claim when necessary for the actual development of such claim consistent with its character.

(c) Making settlement or squatting upon land within a forest reserve, except in accordance with the act of June 11, 1906.

(d) Building roads, trails, railways, or tramways, and constructing ditches, dams, canals, pipe lines, flumes, tunnels, or reservoirs without a permit, except upon patented land or upon a valid claim when necessary for the actual development of such claim consistent with its character.

(e) Erecting or conducting telephone, telegraph, or power lines, hotels, stores, sawmills, power plants, or other structures, or manufacturing or business enterprises, or carrying on any kind of work, within a forest reserve, except according to law and forest reserve regulations, and except upon patented land or upon a valid claim for the actual development of such claim consistent with its character.

(f) Willfully tearing down or defacing any notices of the Forest Service.

(g) Willfully destroying or damaging any property belonging to or used by the United States for forest reserve purposes.

(h) Willfully setting on fire or causing to be set on fire any timber, brush, or grass within a forest reserve, or leaving or suffering fire to burn unattended near any timber or other inflammable material in a forest reserve.

The following trespasses are forbidden by specific acts of Congress and are punishable by fine and imprisonment:

(1) Cutting, destroying, or removing timber or other forest products from land in a forest reserve without a permit, or without having a valid claim to the ground on which such timber or product grows, except the small quantities actually needed by transients while within forest reserves. (Appendix, pp. 159, 191.)

(2) Cutting, destroying, or removing more timber upon an unpatented claim within a forest reserve than is necessary for its actual development. (Appendix, p. 191.)

(3) Cutting and removing timber from one mining claim to be used on another unless such use tends

directly to develop the claim from which the timber is taken.

The burden of proof is upon the claimant to show that use of timber on another claim tends directly to develop the claim from which the timber was cut, and in no case can such use on a noncontiguous claim be justified.

(4) Destroying, defacing, changing, or moving any corner, meander post, monument, or bench mark, or cutting down any blazed line or witness tree on any Government survey. (Appendix, p. 182.)

(5) Chipping, chopping, or boxing trees for turpentine purposes on forest reserve lands, or aiding or encouraging such cutting, chipping, chopping, or boxing; or buying turpentine or other substances obtained by such cutting, with knowledge that it was so unlawfully obtained. (Appendix, p. 182.)

All forest officers have power to arrest without warrant any person whom they discover in the act of violating the forest reserve laws and regulations, or to secure a warrant from a United States commissioner, or, if one is not convenient, from a justice of the peace, and use it as the visible sign of the right to arrest, and also to arrest for any such violation on a warrant obtained by any competent person.

All forest officers are directed to be vigilant in discovering violations of forest reserve laws and regulations and diligent in arresting offenders, either on a warrant secured from a United States commissioner of the district or a justice of the peace, or without such warrant when the offender is taken in the act of violating any provision of Regulation 72 or any criminal law relating to forest reserves. Unless, however, the trespass threatens damage to the forest reserve or interference with its management, or the

offender is likely to escape, no arrest should be made until a report of the trespass, with signed statements from the witnesses, has been sent to the Forester in order that he may give appropriate instructions.

Any forest officer making an arrest must, as soon as practicable, take the offender before the nearest United States commissioner and thereafter stand ready to carry out any mandate of the commissioner relative to the custody of the prisoner. He will also at once inform the supervisor within whose jurisdiction the offense was committed. It shall be the duty of each supervisor to promptly inform the district attorney of any such arrest and to render him the fullest assistance in collecting evidence. Each supervisor will also keep the Forester fully informed of each arrest and of further steps in the prosecution.

When a forest officer makes an arrest he will be reimbursed for the necessary expense incident to such arrest. When such expenses are incurred by a forest ranger he will be reimbursed through the supervisor.

II. CIVIL ACTION.

IN GENERAL.

The United States has all the civil rights and remedies for trespass possessed by private individuals.

If any forest officer discovers a trespass he will notify the trespasser, in the presence of a witness, if possible, to discontinue the trespass, taking care to note the hour, day, and place of notice. He will also report the facts immediately to the supervisor on Form No. 856, and when danger of removal or destruction is imminent will seize all material involved in the trespass and, if necessary, arrest the offender.

Supervisors will report all cases of trespass to the Forester, setting forth the damage done or threatened, including the actual expense incurred in investigating the trespass. If the offer of settlement is not accepted, and the damage seems sufficient to warrant civil suit, the supervisor will be directed by the Forester to place the case in the hands of the United States district attorney.

Thereafter the supervisor will do all in his power to collect evidence for and assist the district attorney in the prosecution of the suit and promptly inform the Forester of each step in the case. Forest officers may administer oaths in securing testimony.

INJUNCTION.

An injunction may be obtained to restrain trespass on forest reserves.

DAMAGES.

Civil actions may be brought to recover damages caused by any trespass or breach of contract, in addition to and exclusive of criminal penalties.

COMPROMISE.

The Secretary of Agriculture has no power to compromise criminal cases, and "a proposition of settlement submitted with the understanding that if accepted criminal proceedings for the trespass will be waived, will be rejected."

SETTLEMENT.

The Secretary of Agriculture has power to settle with any trespasser for the actual civil damages. The rule for measure of damages for timber cut in trespass is as follows: When the trespass is willful, the value of the timber where found; when unintentional, the stumpage value only.

Forest officers will notify trespassers that they may make, upon Form No. 653, offers of settlement to accompany the trespass reports, but no such offer will be considered unless the amount offered in settlement is remitted by postal or express money order or national-bank draft on New York to the Special Fiscal Agent, Forest Service, Washington, D. C. (Reg. 7.)

PUNITIVE DAMAGES.

When trespass can be shown to be malicious or due to such negligence as implies malice "or a reckless indifference to the rights of the Government," especially when a person trespasses after notice, punitive damages may be recovered "notwithstanding the act constitutes an offense punishable under the criminal statutes."

STRUCTURES WRONGFULLY PLACED ON FOREST RESERVES.

When any structure is erected upon forest reserve land without a permit it becomes the property of the United States immediately upon its construction.

PROTECTION AGAINST FIRE.

Probably the greatest single benefit derived by the community and the nation from forest reserves is through the protection of property, timber resources, and water supply against fire. The direct annual loss from this source on *unprotected* lands reaches many millions of dollars; the indirect loss is beyond all estimate.

During 1904, six-tenths of 1 per cent of a total reserve area of 58,052,054 acres, was burned out. In 1905 this was reduced to one-tenth of 1 per cent of a total reserve area of 92,741,030 acres.

The burden of adequate protection against fire can not well be borne by the State or by its citizens, much as they have to gain, for it requires great outlay of money to support a trained and equipped force, as well as to provide a fund to meet emergencies. Only the Government can do it, and, since the law does not provide

effective protection for the public domain, only in the forest reserves can the Government give the help so urgently needed.

Through its fire patrol the Forest Service undertakes to guard the property of the resident settler and miner, and preserve the timber, water, and range upon which the prosperity of all industries depends. The help it can give to the development of the West may be greatly increased by the cooperation of citizens. Destructive forest fires are not often set willfully, but far too commonly they result from failure to realize that carelessness will be followed by injury and distress to others. The resident or the traveler in forest regions who takes every precaution not to let fire escape, and who is active in extinguishing fires which he discovers, contributes directly to the development and wealth of the country and to the personal safety and profit of himself and his neighbors. He who does not, assumes a great responsibility by endangering not only his own welfare but that of countless others.

Citizens' fire brigades have been organized successfully on many reserves. Not only is the prevention of fire to the interest of all property owners, but men under obligation to fight fire because they hold permits will profit greatly by such prevention, because it reduces the work which they may be called upon to do. An organization which will put out a fire before it gathers headway may save them many days' hard work.

Residents in the vicinity of reserves, and especially those holding permits of any kind, are urged to cooperate with the forest officers by holding themselves in readiness to respond with a fixed number of men to a

call from the forest officer. If, for example, one man in each of ten different districts had previously notified the supervisor that he would hold himself responsible for the appearance of himself and nine others at any fire that could not be controlled by the reserve force, by calling on the ten men a force of a hundred would be quickly available. The local ranger should keep these leaders informed of his movements as far as practicable. Towns and cities, lumber companies, water companies, railroads, and others interested are invited to cooperate with the Forest Service in guarding against fire.

Care with small fires is the best preventive of large ones. The following simple regulation may easily be observed by all, and its violation will be treated as trespass. (Appendix, p. 158.)

REG. 73. Camp fires must not be larger than necessary; must not be built in leaves, rotten wood, or other places where they are likely to spread, or against large or hollow logs, where it is difficult to be sure when they are completely out. In windy weather and in dangerous places camp fires must be confined to holes, or by clearing all vegetable matter from the ground around them. A fire must never be left, even for a short absence, before it is completely extinguished.

Officers of the Forest Service, especially forest rangers, have no duty more important than protecting the reserves from forest fires. During dry and dangerous periods this work should be given first place. Most careful attention should be given to the prevention of fires. Methods and equipment for fighting them should be brought to the highest efficiency.

A ranger should never start on fire-patrol duty without an ax or a shovel, or both, and in case he sights a smoke on his district, or

near to it, he must absolutely assure himself of its cause. No opportunity should be lost to impress the fact that care with small fires is the best way to prevent large ones.

The reserves must be thoroughly posted with fire warnings. The fact that some of them are destroyed is no excuse for neglecting this important duty. Often the warning notices can be posted on or near signboards along trails, or notices of reserve boundaries, limits of districts, or excluded areas in grazing ranges, etc. The destruction of these notices is willful trespass, punishable by law. Destroyed notices should be replaced as soon as their loss is discovered.

Forest officers should cheerfully and politely tell hunters, campers, and others about the rules and regulations governing camp fires. An officer who loses his temper or uses improper language in talking with persons who are careless because they do not know about the rules, or have no experience in camping, fails in one of his principal duties. He should call their attention to the mistake and instruct them courteously in the proper way of building and handling fires.

REG. 74. Lumbermen, settlers, miners, prospectors, and other persons using the forest reserves are cautioned against making dangerous slashings, and must not fire them in very dry weather. If it is necessary to burn slashings, ample notice must always be given the nearest forest officer before burning, so that he may take steps to reduce the danger. If notice is not given, or if the ranger's instructions are not followed, the person responsible for the burning will be held strictly accountable for all damage to the reserve, and liable, in aggravated cases, to criminal prosecution.

There is no desire to hamper the work of settlers and lumbermen, nor to limit the rights of property holders, but it is not just that other forests and improvements, whether owned privately or by the Government, should be endangered by carelessness.

The utmost tact and vigilance should be exercised where settlers are accustomed to use fire in clearing land. Public sentiment is rightly in sympathy with home builders, and the control of their operations should give the least possible cause for resentment and impatience with the reserve administration, but it should be exercised firmly none the less. Settlers should be shown the injury to their own interests, as well as to the public, which results from forest fires. Methods and times of burning should be discussed with them, and, if possible, an amicable agreement secured to have no burning except when authorized by the forest officer and when he is present. But while the aim ought always to be toward cooperation and good will, it is equally important to have it well understood that reserve interests will be protected by every legal means.

Where any tendency to ignore instructions is observed, notice must be given that action will be brought for any damage sustained by the United States and that willful negligence will be prosecuted criminally. If this is ignored and damage does result, prosecution must be prompt and vigorous. Where there is sufficient reason to anticipate danger, as from a large slashing which it is announced will be burned at a dangerous time, injunction may be secured. Do not hesitate to use the telegraph to ask advice or report action taken to the Forester.

Similar means should be employed where reserves are endangered by railroads or logging operations on private lands, and prompt report of such conditions should be made to the Forester.

FIRE LAWS AND PENALTIES.

There is ample legal provision for the punishment of malice or carelessness with fires. The act of June 4, 1897 (Appendix, p. 158), instructs the Secretary to make provisions for their protection against fire, and provides for the punishment of any violation of his regulations. The act of May 5, 1900 (Appendix, p. 183), prescribes a maximum fine of \$5,000, or two years' imprisonment, or both, for any person convicted of responsibility for the willful setting of a fire on the public

domain, or for suffering a fire to burn unattended near any inflammable material. It prescribes a fine of \$1,000, or one year's imprisonment, or both, for building a fire and leaving it before it is totally extinguished. Any officer of the Forest Service may arrest violators of these laws.

The fire laws of any State or Territory are applicable to forest reserves within its boundaries, and the United States has recourse to them whenever necessary, with the right to bring civil action to recover damages caused by fire. It is not necessary to prove malice, or even carelessness, or that the fire was set upon Government land. Any person responsible in any way for injury to Government property is liable for the actual damage.

PATROL.

Each supervisor is responsible for the division of his reserve into districts and the assignment of a suitable patrol force to each district. At the beginning of the summer season, or before March 15, each supervisor will recommend to the Forester the number of men needed adequately to protect his reserve, the rate each should be paid, and the number of months each should serve. After consideration of these recommendations the Forester will fix the number for the full summer force of each reserve, and this allotment will be final.

After this number is fixed the supervisor may recommend appointments by wire in the briefest possible terms, for example: "Forester, Washington, D. C.

"Appoint Buckner M. Green guard May one. Smith."

Bear in mind the fact that appointments can not be dated back, and that they must bear the full name of the appointee.

Every ranger or guard must go to and fight every fire he sees or hears of, at once, unless he clearly can not reach it or is already fighting another fire. If he can not put it out alone, he must get

help. The fact that it may not be on his district has no bearing unless he is certain another ranger is there already.

Rangers on fire-patrol duty should avoid spending time and work in places or along routes where there is little danger or small outlook. A clean fire record rather than hours spent or miles ridden is the best indication of efficient patrol. Often a short trip to a commanding point is better than a long ride through a wooded valley. During dry and dangerous periods the selection of headquarters, camping places, and routes should be made with the single object of preventing and discovering fires. It is often necessary for a ranger to be detailed to patrol certain much-used trails or roads by which parties enter the mountains.

Fires caused by lightning are not rare, especially in dry mountain regions. After every electric storm a special effort is needed to locate and extinguish any such fires before they are well under way.

HOW TO FIGHT FIRE.

When once a fire has spread over an acre or more, especially where much dead and down timber makes it very hot, it may be so far beyond the control of one man that it is best to leave it and get help. The character and condition of the woods, the weather, and even the time of day have so much to do with such cases that general directions have little value and all depends upon the experience and good judgment of the ranger.

Generally the best tools for fighting fire are the shovel, mattock, and ax. The ranger should always carry at least an ax during all the dangerous season.

In damp, heavy forest, fire usually travels slowly, and a few men, if persistent, can keep it in check by trenching, even though they may not extinguish it, and must continue the watch until rain falls. In dry open woods fire travels faster, and it is often best to go some distance to open ground, and back fire from

there. In handling back fires great care is needed to avoid useless burning; therefore they should never be set except by forest officers, unless in great emergencies.

The night or the early morning is the best time to work whenever any choice exists, for nearly all forest fires die down, more or less, during the cool of the night and flare up again during the heat of the day.

Following are several general principles to be borne in mind:

- (a) Protect the valuable timber rather than the brush or waste.
- (b) Never leave a fire, unless driven away, until it is entirely out.
- (c) Young saplings suffer more than old mature timber.
- (d) A surface fire in open woods, though not dangerous to old timber, does great harm by killing seedlings.
- (e) A fire rushes uphill, crosses a crest slowly, and is more or less checked in traveling down. Therefore, if possible, use the crest of the ridge and the bottom as lines of attack.
- (f) A good trail, a road, a stream, an open park check the fire. Use them whenever possible.
- (g) Dry sand or earth thrown on a fire is usually as effective as water and easier to get.
- (h) A little thinking often saves labor and makes work successful. Ill-planned efforts suggested by haste and excitement rarely lead to success.

ACTION AND REPORT.

Small fires, extinguished without difficulty by the officer who discovers them, may be reported to the supervisor at the end of the month. He should be notified at once of large ones which require help from residents or other rangers, purchase of supplies, or attendance for several days. But if help is needed the forest officer on the ground should get it at once. He should hire men and messengers, if necessary, send for supplies, and notify the supervisor of the action taken. The supervisor will furnish any further help needed and telegraph the Forester if an amount in excess of \$300 is required. He will also notify the Forester as soon as the total cost of any fire requiring extra help and expense is ascertained.

In reporting upon fires three classes should be distinguished, as follows:

- (a) Camp fires and other small fires covering not more than a few square rods.
- (b) Small forest fires, extinguished without any extra help or expense, and generally not covering over 5 acres.
- (c) Large fires, requiring extra help and expense.

On the last day of each month every ranger and guard will fill out his monthly fire report on Form 944, using a separate column for each fire, or if such is the case, writing "No fires on District _____ during _____, 190—." In case of large class c fires, if in the opinion of the supervisor it is essential for his information, the ranger will supplement his monthly report form with a letter.

EXPENDITURES FOR FIGHTING FIRE.

Every forest supervisor is authorized, in person or through a subordinate, to hire temporary men, purchase tools and supplies, and pay for their transportation from place to place to extinguish a fire; but when it is evident that the expense is liable to be over \$300, he must at once telegraph the Forester for authority to incur the additional expense. No expense for fighting a fire outside a reserve must be incurred unless the fire threatens it.

To promote willing assistance, in every possible instance the supervisor should pay the extra labor in cash on the ground

immediately after the fire is extinguished, taking a signed sub-voucher and transmitting it with his regular monthly expense account. The rate of pay allowed fire fighters is \$0.25 per hour, actual working time. When the supervisor finds it impossible to pay these emergency assistants in cash, Form A may be used. If there is any delay the reason for it should be carefully explained to the men.

Government employees and persons having any sort of permits within a forest reserve are not entitled to compensation for fighting fire.

While the Government is anxious to prevent and fight fires, only a limited amount of money can be devoted to this purpose. Experience has proved that usually a reasonable effort only is justified, and that a fire which can not be controlled by 20 to 40 men will run away from 100 or even more men, since heat and smoke in such cases make a direct fight impossible.

Extravagant expenditures will not be tolerated. Fires are sometimes started for the sake of a job. In and about every reserve it is possible to enlist the cooperation of the better citizens, so that in time of need enough men of the right kind will be on hand. A crowd of men hastily gathered about a town, without organization, interest, or experience is valuable only as a last resort in extreme need.

PERMANENT IMPROVEMENTS.

ROADS AND TRAILS.

In order to render available for use the resources of the forest reserves, to make them accessible for travel, and to protect them, the Forest Service hopes eventually, with the cooperation of the local authorities, to build a complete road and trail system through each.

The Forest Service is not only willing, but anxious, to cooperate with the counties in the construction and maintenance of roads, trails, and bridges within the forest reserves.

Any community which desires to take advantage of this offer should communicate with the forest officer in charge through the proper official.

The supervisor will transmit the request to the Forester in a report covering the following points:

Location and length.

Advantages to be gained and necessity of construction.

Number and class of residents benefited.

Exactly what the local residents or county will contribute toward its construction and maintenance in money, labor, tools, powder, or construction material.

Cost to the Forest Service in money, labor, or timber.

Definite recommendations as to what action should be taken by the Forest Service.

There is urgent need of more and better trails on most of the forest reserves. They are of capital importance, because they are not only the best insurance against fire, but the means by which the reserves can be seen and used.

It is entirely practicable to make a good trail at low cost, even on rough ground, but the man who makes it must know how. A general system or scheme of trails for the whole reserve should first be carefully thought out and decided upon, and those of the greatest immediate importance for protection and patrol should be built first. Trails needed in haste may be made good enough for ordinary saddle-horse or pack-train travel at once, with a view to improvement and permanence later on.

The most important part of trail work, and that for which the supervisor will be held directly responsible, is the preliminary location of the line and grade. Construction work should not commence until he is satisfied that the best possible route has been selected.

The maximum grade of all forest reserve trails should be 20 per cent, unless the expense of keeping within this limit is absolutely prohibitive. When it is found necessary to build switch-backs, the turns should be level and wide enough to give plenty of room for a loaded pack animal.

Logs, snags, brush, or limbs that require turn-outs on a traveled trail will be considered as marks of inefficiency on the part of the

ranger in whose district they are found. For the benefit of the traveling public, all forest reserve trails should be equipped with signboards stating the name of the trail, its destination, and the distance in each direction to its terminal points.

Bridges should be built only where fording is impracticable, but when they are necessary should be strong enough so there will be no danger of their going out with the first high water. The use of rod iron and sawed lumber should be discouraged wherever suitable logs can be obtained from reserve timber.

Where the ground and grade of a trail make drainage necessary to prevent washing, cross gutters or obstructions should be placed at proper intervals to throw water off on the downhill side. As a general rule brush and earth or a small log pegged down obliquely across the trail will answer the purpose.

An estimate for each summer's improvement work will be required from the supervisor on before March 15 of each year. The Forester will pass upon the recommendations and allot a definite portion of the authorization of the reserve to this class of work. This allotment must be strictly followed. It will be charged with expenses for team hire, powder, and other materials (not tools), and temporary labor.

FIRE LINES.

On some of the forest reserves it has been found necessary to begin work on fire-line systems to insure reasonable security against disastrous fires. Where this is done to protect the direct water supply of adjacent towns, cities, or ranches, or the range of permitted stock, the cooperation of the interested residents is earnestly requested.

Range fire lines or lines through open mature timber on easy ground may be cheaply constructed by plowing four or five furrows on each side of a strip 4 rods wide and burning out the intervening strip when conditions render it safe. Lines through chaparral or heavy underbrush should usually be 30 feet wide, cleaned out with an ax, mattock, and brush hook, and the stumps of all strong sprouting species, such as scrub oak, grubbed out.

TELEPHONE LINES.

Arrangements will be made as rapidly as possible to construct telephone lines to connect the supervisor's headquarters with rangers' headquarters and lookout stations, so that fires may be reported and other business of the reserve managed expeditiously.

In many cases this work may be carried on in cooperation with towns, associations of settlers, or telephone companies, and the cost to the Service thus be considerably reduced. It should be borne in mind that the greater the amount of cooperation of this kind the more rapidly can the system be extended.

The supervisor will include in his annual estimate recommendations for telephone lines within his reserve, covering the following points, as well as any additional information which will aid the Forester in considering the recommendations:

(1) The length of the lines it is recommended to build during the year covered by the estimate and the suggested extension of these lines during the year following.

(2) The distance between towns, settlers' houses, rangers' headquarters, and lookout points to be touched by the recommended line and the number and location of instruments to be installed.

NOTE.—In estimating the number of permanent instruments to be installed along the line for official use it should be borne in mind that rangers may be provided with portable instruments which may be attached to the line at any point and telephone connection established. It is, however, very desirable that instruments be installed at various points within easy reach of lookout points, so that fires may be reported by persons not provided with portable instruments.

(3) When possible a map of the proposed route showing the towns, settlers' houses, rangers' headquarters, lookout points, rivers, creeks, canyons, etc., mountains, ridges, roads and trails, and railroads, with their relative elevations, should be prepared and submitted with the estimate.

(4) The length of poles required. The line must be at least 3 feet above snow and brush.

(5) The kind, quality, and height of the timber available for poles along the proposed route, noting distances which timber will have to be hauled to the line.

When considering a route special attention should be paid to existing or proposed roads and trails which will afford means of transport for material when building the line and when repairs become necessary.

CABINS.

Eventually all the rangers who serve the year round will be furnished with headquarter cabins on the reserves. It is the intention of the Forest Service to build these as rapidly as funds will permit. Wherever possible cabins should be built of logs, with shingle or shake roofs.

The hardware, glass, and door and window frames may be purchased on authorization from the Forester. Cabins should be of sufficient size to afford comfortable living accommodations to the family of the ranger stationed in them, and this ranger will be held responsible for the proper care of the cabin and the ground surrounding it. It is impossible to insist on proper care of camps if the forest officers themselves do not keep their cabins as models of neatness.

Rangers' cabins should be located where there is enough agricultural land for a small field and suitable pasture land for a few head of horses and a cow or two, in order to decrease the often excessive expense for vegetables and feed. In course of time several rangers' camps will be needed for each township, and selections of sites should be made with this in view. The amount of agricultural land necessary to supply a ranger's family with vegetables and to raise hay and grain enough to winter his saddle and other stock will vary greatly in different localities, but as a general rule it will not be less than 10 nor more than 40 acres. The field must, of course, be inclosed by a stock-proof fence.

The pasture should be of sufficient size to support the stock not in use by the ranger during the summer, and only in cases where it is obviously necessary should they include land that could be

used for agriculture. They will vary in size, according to the quality of the feed, from 40 to 200 acres. A two or three wire fence strung on posts or trees 30 feet apart will, in most cases, be sufficient to protect these pastures from range stock.

Other improvement work necessary for the proper administration of the reserve, such as corrals, drift fences, counting wings, or tool houses will be authorized when their need is shown in a report to the Forester.

The supervisor will from time to time inform the Forester of results. Before any expense beyond the labor of the reserve force is incurred, except to meet an emergency, previous authority must be secured from the Forester.

MARKING RESERVE BOUNDARIES.

For the benefit of the public and of the reserves forest officers will do their utmost to see that all boundaries are established and clearly marked.

All forest supervisors will be supplied with boundary posters, and with stamps and ink for filling the spaces left on each poster for the name of the reserve and boundary on which the notice is posted. They will see that the reserve limits are kept amply marked, not only at the entrance of trails and roads, but at frequent intervals along the entire boundary where any entrance is probable. There should be at least one notice to each quarter mile where grazing or timber trespass is likely to occur, and the entire line, where it runs through timber, should be plainly marked with fore-and-aft blazes, each blaze stamped in the center with the United States marking hatchet.

Every notice posted must bear the name of the reserve and the proper boundary. If it is desirable to indicate the latter otherwise than by "North," "South," "East," or West," combinations of initials such as "NW." or "SE." may be made.

Where the forest officers can not locate the boundaries of their reserve with sufficient accuracy, or the lines of interior claims or holdings of any kind, the Forester should be informed in order that surveys may be made either by the United States Geological Survey or by experts in the employ of the Forest Service.

Whenever a forest officer finds an old survey corner, either on the boundary or inside the reserve, which is in danger of becoming obliterated, he should take time to reenforce it properly.

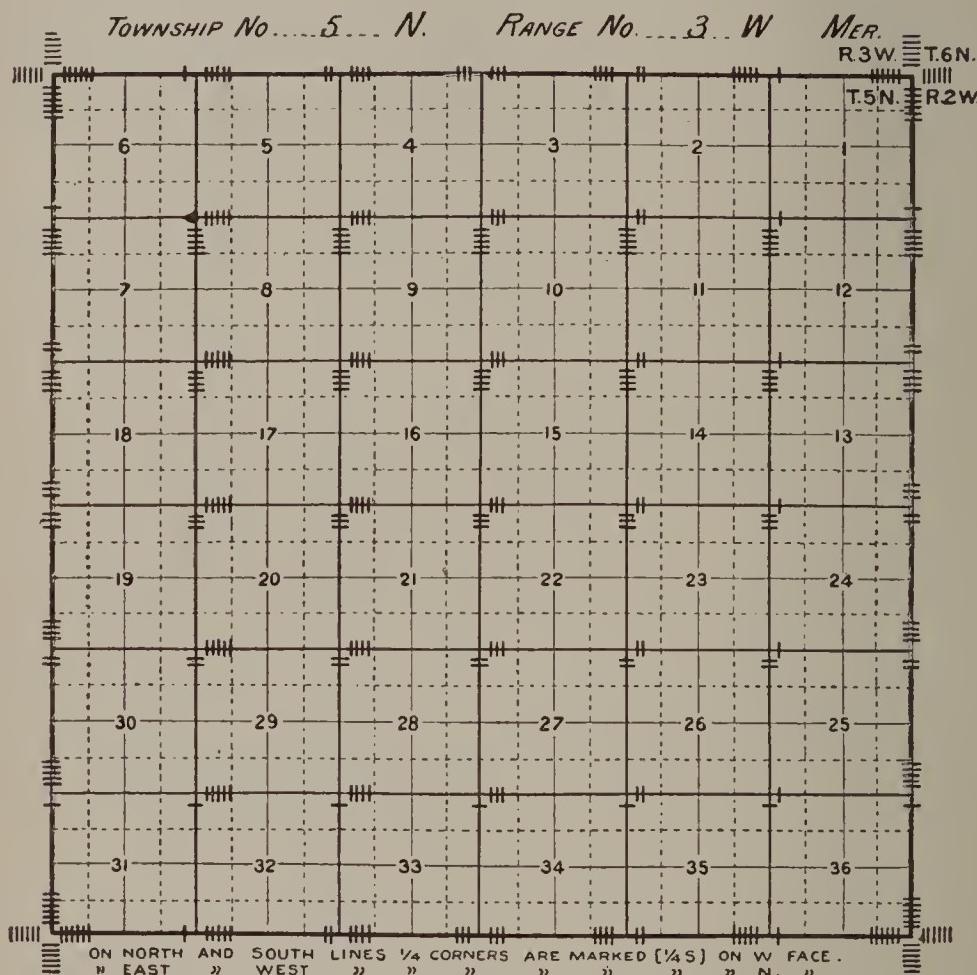


FIG. 1.—System of notching corners.

FIELD AND OFFICE EQUIPMENT.

When they are needed for the good of the service certain articles may be obtained on requisition from Washington. These requisitions must be made in duplicate on Form 668 and must be typewritten. The original requisition will be sent to the Forester without a letter of transmittal unless an explanation is necessary. The duplicate will be retained by the supervisor for his files.

Supervisors will write their initials in the upper left-hand corner of the original, in lieu of a signature and to fix responsibility, but will not sign or initial upon the line above the printed words "Chief of _____."

One or more lines may be used for the description of an article, but not more than ten articles will be described on one sheet. If more than ten articles are to be described, use additional sheets and treat each sheet as a separate requisition.

When it is necessary to requisition by wire, give, first, the list number, then the number of the article and the number required; for example: "One, nineteen, six" would mean one-half dozen blue lumbermen's crayons.

So far as practicable, frequent requisitions for current supplies should be avoided. On or about the 1st of March and the 1st of September of each year supervisors will make requisitions for the stationery, office supplies, and printed forms required by their respective offices for the ensuing six months. To avoid delay, however, articles needed for immediate use at the time the semi-annual requisition is made will be called for in a separate requisition, marked "Special."

All maps and photographic or drafting work should be requested by letter.

LIST I.—FOR OFFICE USE.

Equipment furnished on requisition for use in supervisor's office. In making requisitions by wire order by number when possible.

1. Flat top desk.
2. Sectional filing case, consisting of:
 - (a) Section No. 1—Four-drawer map case, 33" by 14½" by 25".
 - (b) Section No. 2—Two-drawer vertical letter file, 33" by 11½" by 17".
 - (c) Section No. 3—Nine-drawer loose-sheet letter file, 33" by 14½" by 17½".
 - (d) Top and base.
3. Map case, four-drawer unit, base and top.
4. Transfer case.
5. Bent-wood office chair.
6. Typewriter No. 3.
7. Typewriter stand.
8. Card-index case.

9. U. S. flag, 3' by 5'.
10. U. S. flag, 4' by 8'.
11. Loose-sheet holder.
12. Desk pad, 19" by 24".
13. Ink well.
14. Wire desk basket.
15. Penrack.
16. Automatic paper fastener and staples.
17. Penholder, one kind.
18. Pens, fine point and stub.
19. Lumber crayon.
20. Lead pencils, hard, soft.
21. Road pen.
22. Right-line pen.
23. Proportional divider.
24. Ordinary divider.
25. Celluloid triangle, 6".
26. Celluloid triangle, 10".
27. Triangular boxwood rule, 12".
28. Metal rule.
29. T-square.
30. Thumb tacks.
31. Protractor, 180°.
32. Colored pencils, in sets for mapping.
33. Rubber stamps:
 - (a) Title of officer in charge.
 - (b) "Respectfully forwarded to the Forester."
 - (c) "Duplicate, for the information of the Forester."
 - (d) "Received."
 - (e) "Approved."
 - (f) "Answered."
 - (g) "Closed _____. Tr. No. ____."
 - (h) "North."
 - (i) "South."
 - (j) "East."
 - (k) "West."
 - (l) Name of reserve.
- Other necessary stamps.

34. Steel die, "Forest Service" for marking Government tools.
35. Gem paper clips, in boxes.
36. Rubber bands, assorted in boxes.
37. Typewriter brush.
38. Typewriter screw-driver.
39. Typewriter ribbon.
40. Tracing cloth, in yards.
41. Drawing paper, in yards.
42. Forest Service letterhead paper, in boxes.
43. Plain paper for second sheets, in boxes.
44. Ruled letterhead paper, in boxes.
45. Ruled second sheets, in boxes.
46. Yellow scratch paper, in reams.
47. Superior linen for carbon copies, in boxes.
48. Carbon paper, in boxes.
49. Telegraph forms, in pads.
50. Cross section (townships), in sheets:
 - (a) 3" to the mile.
 - (b) 1 $\frac{1}{2}$ " to the mile.
51. Cross section (for profile) in yards.
52. Franked envelopes:
 - (a) No. 6, white, 6" by 3 $\frac{1}{2}$ ".
 - (b) No. 9, white, 8 $\frac{7}{8}$ " by 3 $\frac{7}{8}$ ".
 - (c) No. 9, white, directed to Forester, 8 $\frac{7}{8}$ " by 3 $\frac{7}{8}$ ".
 - (d) No. 9, manila, 8 $\frac{7}{8}$ " by 3 $\frac{7}{8}$ ".
 - (e) No. 10, white, 9 $\frac{1}{2}$ " by 4 $\frac{1}{8}$ ".
 - (f) 5" by 8 $\frac{1}{2}$ ", manila (for Use Book).
 - (g) 9 $\frac{1}{2}$ " by 12", manila.
 - (h) 10" by 14", manila.
53. Franks for mailing packages.
54. Erasers for:
 - (a) Typewriter.
 - (b) Ink.
 - (c) Pencil.
55. Rubber-stamp pad:
56. Rubber-stamp ink.
57. List of publications of the Forest Service.
58. List of publications of the Department of Agriculture.

LIST II.—FOR FIELD USE.

Equipment furnished on requisition for use on the reserves.

1. Forest Service badge.
2. U. S. marking hatchet.
3. U. S. marking ax.
4. U. S. marking hammer.
5. Calipers:
 - (a) 18".
 - (b) 34".
 - (c) 50".
6. Marking calipers:
 - (a) 18".
 - (b) 34".
7. Scribner scale rule (Decimal C).
 - (a) 36".
 - (b) 48".
8. Field notebook.
9. Ranger's notebook.
10. Steel tape:
 - (a) 50'.
 - (b) 100'.
11. Timber scribe.
12. Tally register.
13. Pocket sight compass, 2" needle.
14. Surveyor's compass, 3" needle.
15. Tripod.
16. Chain, (a) 33' and (b) 66'.
17. Range pole.
18. Surveying pins, in sets of nine.
19. "First Aid to the Injured," pamphlet.
20. "First Aid to the Injured," packet.
21. Tally board (for valuation survey), (a) 8" by 8 $\frac{3}{4}$ " and (b) 10 $\frac{3}{4}$ " by 13".
22. Jacob staff.
23. Wall tent:
 - (a) 7' by 9'.
 - (b) 9' by 9'.
24. Hospital tent, 14' by 14'.

25. Tomahawk and sheath.
26. Boundary notices:
 - (a) English.
 - (b) Spanish.
27. Reserve notices:
 - (a) English.
 - (b) Spanish.
28. Property notices:
 - (a) English.
 - (b) Spanish.
29. Forest fire warning:
 - (a) English.
 - (b) Spanish.
30. Woodsman's Handbook.

LIST III.—FIELD INSTRUMENTS.

The following equipment is furnished only to forest assistants assigned to a reserve when requisitioned through the supervisor:

1. Plane table.
2. Tripod.
3. Traverse tables.
4. Telescopic alidade.
5. Sight alidade.
6. Philadelphia stadia rod.
7. Barrel magnifying glass.
8. Planimeter.
9. Set of drafting instruments.
10. Abney level.
11. K. and E. range finder.
12. Octagonal staff head.
13. Hypsometer:
 - (a) Göhler.
 - (b) Faustmann.
14. Increment borer.
15. Brunton compass.
16. Focusing camera, roll-holder attachment.
 - (a) 5" by 7".
 - (b) 4" by 5".

17. Camera case.
18. Camera tripod.
19. Photographic films, 6 to the roll, with notebooks.
20. Aneroid barometer:
 - (a) 10,000'.
 - (b) 12,000'.
 - (c) 15,000'.
21. Field chest.
22. Monocular field glass.
 - (b) Case.

LIST IV.—FORMS.

The following forms are in effect July 1, 1906, but are subject to change. They should be requisitioned by number only.

TIMBER SALE.

- (Sheet) Form 878, "Map Sheet."
- (Sheet) Form 578, "Timber Estimate and Description."
- (Sheet) Form 821, "Timber Sale" (application and contract).
- (Card) Form 615, "Timber Sale" (record).
- (Sheet) Form 820, "Report of Timber Cut."
- (Card) Form 606, "Weekly Scale Report."
- (Book) "Scale Record."
- (Book) "Comparative Scale Record."
- (Sheet) Form 640, "Letter of Approval of Timber Sale Application" (for use by Washington office).
- (Slip) Form 629, "Notification that case is closed" (for use by Washington office).
- (Sheet) Form 941, "Bid for Advertised Timber."
- (Card) Form 940, "Timber Settlement" (record).
- (Card) Form 935, "Certificate of Publication."
- (Sheet) Form 615, "Valuation Survey Blank."
- (Sheet) Form 88, "Valuation Survey Blank" (large size).
- (Sheet) Form F595, "Stem Analysis Blank."

FREE USE.

- (Sheet) Form 831, "Application and Agreement for Free Use."
- (Card) Form 617, "Free Use" (record).

GRAZING.

(Sheet) Form 630, "Certificate Supplemental to Grazing Application."

(Sheet) Form 631, "Agreement."

(Sheet) Form 656, "Grazing Permit."

(Sheet) Form 657, "Application for Grazing Permit."

(Sheet) Form 762, "Notification of Approval of Grazing Application" (letter).

(Card) Form 621, "Grazing" (record).

(Sheet) Form 925, "Application for Crossing Permit."

PRIVILEGE.

(Sheet) Form 832, "Special Privilege Application and Agreement."

(Card) Form 619, "Privilege" (record).

(Sheet) Form 964, "Report on Privilege Application."

TRESPASS.

(Sheet) Form 653, "Timber Trespass, Proposition of Settlement."

(Sheet) Form 856, "Report on Trespass."

(Card) Form 618, "Trespass" (record).

CLAIMS.

(Sheet) Form 654, "Report on Mining Claim."

(Sheet) Form 655, "Report on Agricultural Settlement."

(Card) Form 937, "Agricultural Claims" (record).

(Card) Form 938, "Mining Claims" (record).

FISCAL.

(Sheet) Form 861, "Letter of Transmittal."

(Slip) Form 627, "Certificate of Deposit."

(Card) Form 626, "Fiscal" (record) (used only in Washington, D. C.).

(Sheet) Form B, "Authority to Publish Advertisement" (prepared in Washington office) combined with voucher for settlement of advertising account (executed by publisher).

(Sheet) Form 961, "Affidavit of Publication and Advertising Rates."

ADMINISTRATION.

- (Book) Form 847, "Rangers' Service Report."
- (Slip) Form 647, "Certification of Services of Forest Officer."
- (Card) Form 620, "Personnel" (record).
- (Sheet) Form 668, "Requisition for Supplies."
- (Sheet) Form 944, "Monthly Fire Report."
- (Sheet) "Resignation" (Departmental form).
- (Card) Form 560, "Request for Forwarding Mail" (postal).

LEGAL.

- (G. L. O.) Form 4-181, "Bond."

ACCOUNTS.

- (Sheet) Form 3, "Salary Voucher."
- (Sheet) Form 4, "Reimbursement Voucher."
- (Slip) Form 99, "Distribution of Expenditures."
- (Slip) Form 785, "Request for Leave of Absence."
- (Book) Form 4a, "General Expense Subvoucher" (superseding 4a, 4b, and 4bb).
- (Book) Form E1, "Subvoucher for Telegraph Service."
- (Sheet) Form A, "Payment from Washington for Field Purchases Voucher."
- (Sheet) Form R, "Informal Bid for Supplies."
- (Book) "Fiscal Regulations of the Department of Agriculture."
- (Sheet) Form 939, "Property Invoice or Receipt."
- (Slip) Form 943, "Transfer of Property in the Field."
- (Sheet) Form 858, "Certificate of Loss or Damage of Property."

**LIST V.—MATERIALS AND SUPPLIES TO BE PURCHASED
IN THE FIELD.**

The following articles may be purchased in the field by supervisor after first reporting the necessity and securing authority and instructions from the Forester to proceed. All nonexpendable property thus purchased is charged to the supervisor on the books of the property auditor, and he must use the utmost

diligence to make only actually necessary purchases and to take care of the property. Receipts on Form 943 for every piece of property in rangers' hands must be on file in the supervisor's office.

Axes, single and double bitted and broad.	Ink, writing and colored drawing.
Adzes.	Log chains.
Anvils.	Lanterns.
Blasting equipment and material.	Lumber needed for construction.
Brush hooks.	Machetes.
Canthooks.	Mattocks.
Crowbars.	Mauls.
Drawing board; specifications furnished on request.	Paste, for office.
Files.	Pickaxes.
Forges.	Pitchforks.
Frows.	Pliers.
Frames, window and door.	Rope.
Grindstones and stands.	Rakes.
Glass, for cabin windows.	Saws, crosscut.
Hardware needed in construction work.	Stoves, for ranger cabins.
Handles—axe, mattock, pick, adze, hatchet, and saw	Shovels.
Hatchets, shingling.	Spades.
Hoes.	Skidding tongs.
	Tools, carpenter's and horse-shoeing.
	Telephone materials.
	Wire, 'phone and fence.
	Wire stretchers.

Articles not in this list may be bought upon special permission from the Forester.

When any one purchase amounts to over \$50, competitive bids from at least three merchants must be secured, but when this is impossible, a statement of the reasons should be submitted. Competition should also be secured for purchases of less than \$50 whenever practicable. (See paragraph 11 of the Fiscal Regulations of the Department of Agriculture.)

Under no circumstances will personal or horse equipment, such as saddles, saddle pockets, blankets, canteens, firearms, cook or

pack outfits, etc., be furnished reserve officers. The cost of any reserve equipment that can not satisfactorily be accounted for will be deducted from the salary of the officer to whom charged.

SUPERVISORS' ACCOUNTS.

SALARY VOUCHERS.

(1) After July 1, 1906, all accounts on Form 3, Form 4, or Form A will not be submitted in duplicate. All salary vouchers of forest supervisors, rangers, and guards must be prepared, signed, and certified upon Form 3. Supervisors will not certify their own salary vouchers, since they are certified in Washington. They will certify their subordinates' salary vouchers when the number of days for which payment is claimed is correct. When the number of days' service claimed is not correct, they will forward the salary vouchers uncertified and accompanied by a statement on Form 647 of the days for which salary is not due and the reason for its disallowance.

(2) The Fiscal Regulations of the Department of Agriculture provide that if pay be at an annual or monthly rate, Sundays and legal holidays (January 1, February 22, May 30, July 4, the first Monday of September, Thanksgiving Day, and December 25) will be included in the period of service. In accordance with this regulation, no deductions in the pay of forest rangers or other officers of the Forest Service (on a monthly or annual rate of compensation) will be made merely on the ground that no work was performed on these days. If the best interests of the reserve will not suffer from the absence of a forest ranger from his district on any particular Sunday or holiday, he may be permitted to omit his regular duties or leave the reserve for that day if he so desires, and his pay vouchers may be certified without deduction. On the other hand, if the best interests of the reserve demand that he be in his district and on active duty on any particular Sunday or holiday, and if he refuses to work or leaves his district under these circumstances, certification should be withheld.

After the words "For service rendered as," only the title of the forest officer, such as ranger or supervisor, should be inserted.

Officers allowed a per diem will enter as a separate item the dates for which it is due, but will not enter the amount.

The name entered at the top of a pay voucher must be identical with the signature.

SUPERVISORS' OFFICES.

Reserve headquarters should be located in the nearest town to the reserve that offers proper railroad, telephone, telegraph, and mail facilities, and may be secured only through the permission of the Forester. In every case an office should be equipped with a proper sign. Request for authority to rent an office must describe the location and condition of the building and the rooms, and give in detail what is secured with the office, as light, heat, telephone, or janitor service. The danger from fire should be carefully considered and reported upon. In every case a lease will be prepared in the Washington office for execution by the lessor. Supervisors must never occupy an office that is furnished rent free by a company or individual.

EXPENDITURES.

The Fiscal Regulations of the Department of Agriculture must be followed literally in incurring expenses and preparing accounts, to secure their payment.

REG. 75. No expenditure may be made without previous authority, but by order of the Secretary of Agriculture the Forester will sign letters of authorization to forest officers. Such letters are drawn so as to facilitate the settlement of accounts for expenses incurred in the administration and protection of the forest reserves, but the aggregate amount of expenses incurred thereunder must not exceed the amount allotted, and must be sanctioned by previous instructions issued by the Forester, except in emergencies, for which provision is made in Regulation 12 of the Fiscal Regulations.

The terms and amount of a letter of authorization must cover every expense incurred, including the purchase of supplies, trav-

eling expenses, whether on transportation request or actually paid, and the pay of any assistant not appointed by the Secretary of Agriculture.

The terms and the total amount which may be expended under a letter of authorization are subject to amendment when necessary. When an amendment is required, or if any doubt arises as to the propriety of incurring certain expenses under the letter of authorization, forest officers will communicate promptly with the Forester.

An account for reimbursement of expenses incurred for any purpose, under a letter of authorization, must be prepared, upon Form 4, in accordance with the Fiscal Regulations and the printed instructions on the back of the vouchers. (See Reg. 19.)

In the use of subvouchers the detailed instructions of the Fiscal Regulations must be followed closely.

Items suspended for explanation should be included as the last entry in the first monthly account submitted after the receipt of notice of suspension and must be accompanied by explanation. Suspended items occurring in the last month of the fiscal year (June) should be submitted in a supplemental account and not in the expense account for the first month of the next fiscal year (July), because all accounts must be paid from the appropriation for the fiscal year in which the expense was incurred.

Form 99 must accompany each Form 4 or Form A submitted for settlement. Payment will be withheld until this form is received. If an account covers expenses incurred for more than one reserve a Form 99, properly filled out for each reserve, must accompany it.

Accounts for rental of supervisors' headquarters should be submitted on Form A, and should describe the premises rented and state the period (with inclusive dates) for which payment is claimed.

When authorized, railroad transportation may be paid for and entered in an expense account, or, if continuous for 100 miles or more, it may be secured through a Government transportation request. Applications for transportation requests should be made to the Forester by letter or, in an emergency, by telegram. The cost of tickets secured therewith is charged against the supervis-

ors' letter of authorization, and must be reported upon the form provided on the back of the regular monthly account.

Travel over a bond-aided road should always be made upon a Government transportation request, and shipment of freight over either a bond-aided or a land-grant road must be made upon a Government bill of lading. There are now but two bond-aided railroads—from Atchison, Kans., to Waterville, Kans., operated by the Missouri Pacific, and from Ogden, Utah, to San Francisco, Cal. (Central Pacific, operated by the Southern Pacific). Freight and express to Washington, D. C., must be sent collect.

Payment of freight charges on shipment made on a bill of lading will be made direct to the railroads interested by the Washington office and should never be made by the forest officer.

TEMPORARY LABORERS.

If the best interests of a reserve require the temporary employment of men for work on forest fires, fire lines, roads, trails, cabin construction, and other work distinct from the ordinary patrol and protective duties of guards and rangers, such men may be employed by the supervisor at the rate of not over \$60 a month (except in case of fire, when not more than 25 cents an hour may be paid) and for a period of not over six months. These men are designated "laborers," and, not being appointed by the Secretary of Agriculture, are not in the Forest Service, have not the power to arrest, and must not be given the full duties and authority of guards or rangers.

REG. 76. Before employing temporary laborers, supervisors must inform the Forester of their names, the dates at which they are to begin work, and the necessity of their services. They must not begin work until the supervisor has been instructed that they may do so by the Forester, except that in an emergency, such as fire, they may be employed without such instructions, if immediate report of such action is made.

Temporary laborers, except in case of fire, will be paid direct from Washington upon Form A vouchers.

LEAVES OF ABSENCE.**LEAVE WITH PAY.**

REG. 77. Leave with pay not to exceed fifteen days in one calendar year may be allowed to all officers of the Forest Service on an annual rate of compensation and permanently stationed outside the District of Columbia. Laborers serving on a daily or monthly rate can not be given leave with pay. (Appendix, p. 164.)

Officers whose service is continuous may receive the full fifteen days' leave of absence at any time during the year, provided it is still due them and they have been in the service twelve months. At any time during their first twelve months' employment they are entitled only to the leave which has accrued, at the rate of one and one-fourth days a month.

Officers whose service is periodical, including forest guards and rangers employed only during the summer, are entitled at any time only to leave which has accrued during their service in the current year.

Sundays and legal holidays are not charged against leave when included in the period of absence from duty. Thus, but two days' leave is required to cover Saturday, Sunday, and Monday.

When it will not be detrimental to the interests of their reserves, supervisors may grant their subordinates leave under the above regulations, in every case attaching a report thereof upon Form 647 to the pay voucher of the officer for the month in which the leave is taken. No subordinate officer may take leave without permission from the supervisor. No supervisor may take leave without instructions from the Forester.

SICK LEAVE.

REG. 78. Fifteen days' sick leave with pay may be granted to forest officers appointed by the Secretary if they are ill and unable to perform their official duties.

Sick leave may be granted by the supervisor at any time during the year, but not to exceed a total of fifteen days in any one cal-

endar year. It should be reported in the same manner as annual leave on Form 647.

INSURANCE.

To facilitate securing insurance at the lowest possible rate a mutual benefit association has been formed of employees of the Forest Service, the Geological Survey, and the Reclamation Service. This is solely for the purpose of giving employees health, accident, and life insurance at cost and preventing unnecessary burdens falling upon the associates of sick or disabled men. Information concerning membership in this association can be obtained from the supervisor.

LEAVE WITHOUT PAY.

Supervisors may grant leave without pay when urgent private business, family sickness, or an absolute necessity requires absence from duty, but in no case for more than thirty days. Leave without pay may be granted without reference to the period of prior service, but report thereof must be attached to the pay voucher, on Form 647, as in the case of leave with pay.

ABSENCE CONNECTED WITH DUTY.

The absence of a forest officer from his district or from the reserve, absolutely required to obtain supplies, horseshoing, mail, or for other purposes necessary to the performance of his duty, such as fire fighting, may be considered actual service and does not require leave. Such absence must not be longer than is actually necessary. Where it is practicable for an officer to obtain all facilities within his district he will be allowed no absence for this purpose. Supervisors are required to be familiar with the situation in each case and to approve only necessary absence.

When a forest officer is legally required to attend as juror or witness he may leave the reserve without loss of pay, after obtaining the supervisor's permission.

Supervisors need not obtain permission in such cases, but should report such absence on Form 647 at the end of the month.

RECORDS, REPORTS, AND CORRESPONDENCE.**RANGERS' RECORDS AND REPORTS.**

All rangers and guards, in addition to recording the necessary information and reports upon the regular blank forms for free use, timber sales, supervision of cutting, fire, etc., are required to keep a diary, in the notebook furnished for the purpose, of the reserve work or reserve business upon which they have been engaged each day. In filling out this diary, which becomes a service report to be sent to the supervisor on the last day of each month, accompanied by a signed salary voucher, what was done each day will be stated briefly but comprehensively. If patrol was performed the exact country ridden over and the miscellaneous work done should be stated; also whether any fires were discovered or extinguished. If scaling was done the sale and the amount scaled should be designated. The names of people with whom reserve business was transacted and the nature of the business should be given. It is not necessary to give the number of miles traveled. Above all things a perfunctory, cut-and-dried report should be avoided. Willful omission or falsification of service reports is cause for dismissal from the Service. Temporary assistants will be reported for by the ranger to whose district they are assigned.

The following is a sample of a ranger's diary correctly made out:

August 10, 1906.—Rode up Copper Creek Trail to Frog Pond Basin. Trail washed half mile below forks. S. J. Smith's cattle off their range. Drove them back over ridge. Scaled 5,345 feet bug-killed pine on J. R. Hurst's sale. Took application for agricultural lease in basin from Jack Wade. Issued F. U. permit to Mrs. Grant for 5 cords dead fir from ridge back of her place. Fixed trail on return to camp. No fires. Wrote supervisor about Smith's cattle.

Started work 7.45 a. m.

Quit work 6.15 p. m.

SUPERVISORS' REPORTS.

Supervisors' reports should be as concise as possible, but must give full information. Special attention should be given to recommendations.

1. GRAZING.

Annual reports upon grazing business and condition of the range, to be mailed within thirty days after the close of the grazing season, covering the following points:

A. GENERAL RANGE CONDITIONS.

A general statement of amount of rainfall and forage as compared with other years. The condition of the range at the close of the season, and whether or not any portion of it is being injured by overgrazing.

The condition of the stock at the time of entering and leaving the reserve.

The market conditions in reference to the sale of stock during the season.

Matters of general interest concerning the welfare of stock grazing upon the reserve. (Poison, predatory animals, etc.)

B. RANGE DIVISIONS.

Changes desired in the division of the range into general grazing districts:

The division of districts between different classes of stock or its owners.

The closing of areas against sheep, goats, cattle, or horses, for the protection of watersheds or of lands to be reforested.

The construction of drift fences for the purpose of effectively dividing or protecting the range.

The distribution of stock upon the range in reference to changes in the number allowed upon districts or divisions.

The establishment of driveways and restrictions in their use.

C. PERMIT ALLOTMENTS.

Report on the general plan adopted in the approval of grazing applications or recommendations for change.

The necessity of any special rules in reference to the allotment of grazing privileges.

The establishment of protective limits for the benefit of small owners or of maximum limits to prevent range monopoly.

D. LIVE-STOCK ASSOCIATIONS.

The cooperation of associations, through their advisory boards or otherwise, in matters pertaining to range management.

Methods used in settling controversies and adjusting range disputes.

E. GRAZING MAP.

A map showing the range divisions and driveways within the reserve and indicating changes recommended; also showing areas closed or to be closed against grazing any class of stock and areas which have been badly overgrazed.

F. RECOMMENDATIONS.

Increase or decrease in the number of stock to be grazed on the reserve during the coming season.

The distribution of the stock between districts.

The period during which grazing should be allowed in different portions of the reserve and for different classes of stock.

The prices to be charged for grazing each class of stock.

Special rules to meet local conditions.

2. POLICY AND PERSONNEL.

Annual report due in Washington December 1, covering the following points:

Suggested changes in the Use Book.

Brief separate report on each subordinate, with recommendations for reduction or promotion.

Changes in boundaries of the reserve.

Residents in the reserve.

Condition of local sentiment, with recommendations for reserve policy.

3. FIRES.

Annual report due in Washington January 1, covering the following points:

- (a) Number of fires of each class—*a*, *b*, and *c*—for each month.
- (b) Summary of causes of fires.
- (c) Total number of acres burned over.

- (d) Number of acres of merchantable timber burned.
- (e) Total number of feet B. M. destroyed.
- (f) Value of all timber destroyed.
- (g) Cost of fires—
 - For labor (exclusive of rangers).
 - For supplies.
 - Total cost.

In addition to this report a brief history of all large fires should be submitted in a letter to the Forester immediately after each is extinguished.

4. IMPROVEMENT WORK.

Annual report due in Washington January 10, covering the following points:

Report on accomplishment of each piece of work planned in Report No. 6, made the previous March.

Exact cost, inclusive and exclusive of ranger labor, of each piece of work finished.

Outline small-scale map of the reserve showing the location of each permanent improvement.

5. FREE USE BUSINESS.

Annual statement for calendar year due in Washington January 20, covering the following points:

- (a) Number of permits issued in each ranger district.
- (b) Amount of material used in cords, poles, posts, and house or sawlogs (in thousand board feet) on whole reserve.
- (c) Rate per unit of measure for each class of timber and total value.
- (d) Approximate area cut over under free use permits.
- (e) General statement of the manner in which the business was conducted and recommendations for any improvement.

6. ESTIMATE AND PLAN FOR ENSUING YEAR

Estimate of administrative expenses and plan of work for the ensuing fiscal year, due in Washington March 15, covering the following points:

- (a) Salaries. Number and grade of men necessary for proper administration and length of service, in months, of each.

(b) Expenses:

- (1) Travel—expenses for lodging, subsistence, and transportation.
- (2) Equipment—tools, instruments, etc., not obtainable by requisition.
- (3) Communication—materials and labor, other than ranger labor, for the construction and maintenance of roads, trails, bridges, and telephones.
- (4) Shelter—office rent, and extra labor, and material other than equipment for the construction of cabins, pasture fences, etc.
- (5) Protection—extra labor for burning brush, marking timber, herding trespassing stock, and construction and maintenance of fire lines.

TECHNICAL REPORTS.

Monthly report of the forest assistant transmitted through the supervisor on the technical forest business of the reserve.

SUPERVISORS' RECORDS.

Every supervisor is required to record the condition and business of his reserve under the following heads. These records furnish the basis for his reports.

- (1) Ranger service. (Card record.)
- (2) Free use of timber. (File of duplicate permits.)
- (3) Sale of timber. (Card record.)
- (4) Forest mapping and estimating. (File of rangers' correspondence and maps.)
- (5) Grazing. (Card record.)
- (6) Claims and patents. (Data from local land office.)
- (7) Privileges. (Card record.)
- (8) Rights of way. (Card record.)
- (9) Fires. (Rangers' monthly reports.)
- (10) Trespass. (Card record.)
- (11) Miscellaneous work. (File of rangers' service reports.)
- (12) Accounts. (Supervisor's books.)

Every supervisor is required to keep a diary, in which he will record for each day of service his work and movements and the

progress and notable happenings of his reserve. This constitutes the supervisor's service report which will be examined and signed by each forest inspector visiting the reserve.

MAPS OF RESERVES.

It is essential that the supervisor's office be equipped with accurate large-scale reserve maps, both for the information of reserve users and for the supervisor's records. As far as possible black and white photographic prints or lithographic prints, United States Geological Survey topographic sheets, and Land Office plats will be furnished from the Washington office on request. As fast as maps are supplied they should be used to record much of the detail of progress of timber sales and other reserve business.

1. TIMBER-SALE MAPS.

As rapidly as the data can be obtained, a tracing on a scale of an inch to the mile will be made in Washington for each of the reserves, beginning with those sections on which important timber sales are in progress or anticipated. These will show topography, drainage, improvements, and surveys. On duplicate prints of these tracings timber, alienated land, and boundaries of all timber sales on record in the Washington office will be shown. One copy will be retained in this office and the other sent to the supervisor accompanied by extra blank prints.

One of these blank prints, which becomes a correction print, will be returned to Washington at the end of three months, or sooner if called for. It is intended that the supervisor, through the help of his forest assistant, if one is assigned to his reserve, will keep his map strictly up to date and send correction prints whenever necessary to correct the map on file in Washington. This correction map should show as accurately as possible the additions to the colored map in distribution of the forest, location of timber sales, timber trespasses, and timber settlements, patented land, valid claims, and the location of all permanent improvements or means of transportation connected with logging, such as roads, sawmills, dams, flumes, or chutes. The outline of natural lumbering divisions, which in most cases will follow divides, and the boundaries of each timber sale should

be clearly shown. Supervisors should bear in mind that all data furnished by any forest officer, including that on map sheets, will not only be of great value in the Washington office, but will tend to simplify the administration of their own reserves.

2. GRAZING AND ADMINISTRATIVE MAPS.

When the large scale prints mentioned above are furnished to the forest officers they will be accompanied by reduced prints on a scale of one-half inch to the mile. The map accompanying the annual grazing report (p. 128) should be made on a copy of this small scale map showing in one color the boundaries and numbers of the grazing districts and, in case they do not coincide, in another color the boundaries and numbers of the ranger districts. In every possible case, however, they should coincide.

3. MAPS FOR FIELD USE.

Most of the forest reserves created since January 1, 1904, were examined and mapped by the Forest Service. These maps were made in duplicate on a scale of one-half inch to the mile, one showing the classification of lands and the other the patented and entered claims. These type and title maps, as they are called, will be furnished to every supervisor and as rapidly as possible to every ranger. Blank prints are available now for distribution among the reserve officers and the supervisor will be held responsible that his rangers are furnished with adequate maps of their districts.

In addition, small diagrams on a scale of an inch and a half to the township are now made as part of the proclamation creating the reserve. These may be had by any forest officer on application to the Forester.

CORRESPONDENCE.

To facilitate filing, every letter or report from a forest officer should contain but one subject. Every application, sale, privilege, trespass, or other transaction identified by an individual name or number, must be treated separately.

Never write a letter of transmittal in forwarding any document, unless some special statement about it is needed. Indorse the

document "Respectfully forwarded to (give initial)," add your recommendation, if any is required, sign, and mail, addressing only "The Forester, Forest Service, Washington, D. C."

To maintain the standard of correspondence of the Forest Service, the following instructions will be carefully observed:

Use direct, clear-cut language. Avoid unwieldly words where shorter, simpler ones will express the idea equally well. Be concise, but courteous. Avoid laborious statements, the essence of which might well be expressed in half the space.

Very few letters need be longer than one page.

Never use the substance of the letter received as a preamble to the reply. Unless the incoming letter has already been acknowledged and further reference to it is necessary its subject should not be indicated.

For acknowledgments or replies, the first sentence should always refer to the initial in the upper left-hand corner of the letter answered, and its date; for example: "In reply to your letter (M) of March 30;" followed by a colon and a new paragraph.

Except on printed forms, writing must be on one side of the sheet only.

All rangers' correspondence and reports must be in ink or indelible pencil.

Supervisors will conduct all their correspondence in typewriting, except when away from their offices. Machines will be furnished upon requisition.

Letters and reports of subordinates transmitted by a supervisor to the Forester must be originals, not copies made by the supervisor. The supervisor will keep copies when needed for his own records, or, when necessary, request the return of the originals.

Rangers will report only to the supervisor or to officers whom he may designate. They will correspond with the Forester only upon personal matters or to make complaints.

All supervisors will register their telegraphic addresses at the nearest telegraph office. In large towns this should be done with both the Western Union and the Postal Telegraph companies. This address, as it counts as part of the message, should consist only of the last name of the supervisor, his headquarters town, and the State or Territory. For example: "Breen, Flagstaff, Arizona." Whenever this is done the Forester should be notified by

mail of the address registered. In communicating with the Washington office by wire address only "Forester, Washington, D. C." and sign the last name only. Whenever a supervisor leaves his headquarters he should notify his telegraph office of the place where he can be reached by mail when not in direct telegraphic communication. Supervisors need not hesitate to use the wire when important matters demanding quick action arise, but they must make all telegrams as brief and condensed as possible.

FILING.

Press copying will be discontinued. A carbon copy will be made of every letter written in the supervisor's office and attached to the letter to which it replies by a metal fastener, and the two should always be filed together.

The standard filing case (see fig. 2) for reserve headquarters will consist of three units with top and base. These units will be designated sections 1, 2, and 3. Up to the present time a fourth unit has been supplied to forest reserve headquarters. This unit, which will be designated as section 4, no longer constitutes a part of the standard filing case. Section 1 consists of a 4-drawer map (33" by $14\frac{1}{2}$ " by 25") unit. Section 2 consists of a 2-drawer vertical (33" by $11\frac{7}{8}$ " by 17") unit. Section 3 consists of a 9-drawer correspondence (33" by $14\frac{7}{8}$ " by 17") unit. Section 4 consists of a 6-drawer document unit. Additional units (except section 4) will be furnished, when required, on requisition to the Forester.

USE OF FILING CASES.

Section 1 will be used for keeping maps, printed blanks, stationery, etc.

Section 2 will be used for filing documents, correspondence, and other papers relating to designated transactions. Subject guides with printed headings as follows will be used: "Timber sales," "Timber Settlements," "Free use," "Privileges," "Claims," "Trespass," "Grazing—cattle and horses," "Grazing—sheep and goats." Behind each subject guide will be filed the papers relating to the transactions under that subject. The papers relating to a particular transaction will be kept in a folder, upon the upper

left-hand margin of which will be written the proper designation of the transaction. Folders containing papers relating to any subject except grazing will be arranged alphabetically by the name of applicant, trespasser, claimant, or mine, as the case may be. Folders containing papers relating to grazing will be arranged

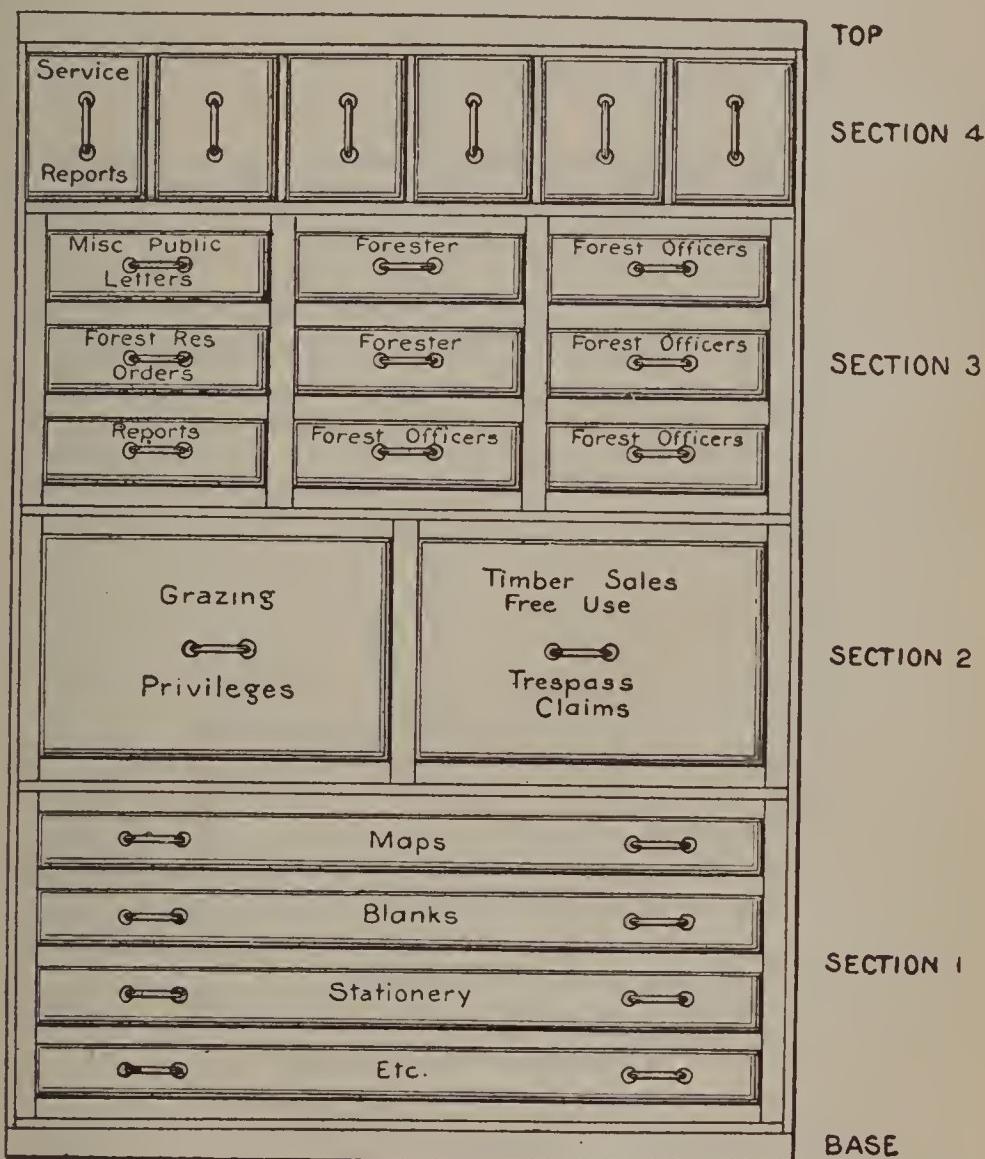


FIG. 2.—Arrangement of filing case, and use of different sections.

numerically by the number of application. When warranted by the number of folders under any subject, except grazing, alphabetical (A to Z) guides may be used. When warranted by the number of folders under grazing, guides with blank tabs may be used to indicate the relative positions of the numbers on the fold-

ers. Figures 3 and 4 show the manner in which these alphabetical and numerical guides may be used.

Section 3 will be used for filing correspondence, reports, and forest reserve orders. One drawer will be used for miscellaneous correspondence with the public. This drawer will be supplied with an alphabetical (A to Z) index. Letters relating to a designated transaction do not fall under this head and will be filed in section 2 in the folder containing all papers in the case. One

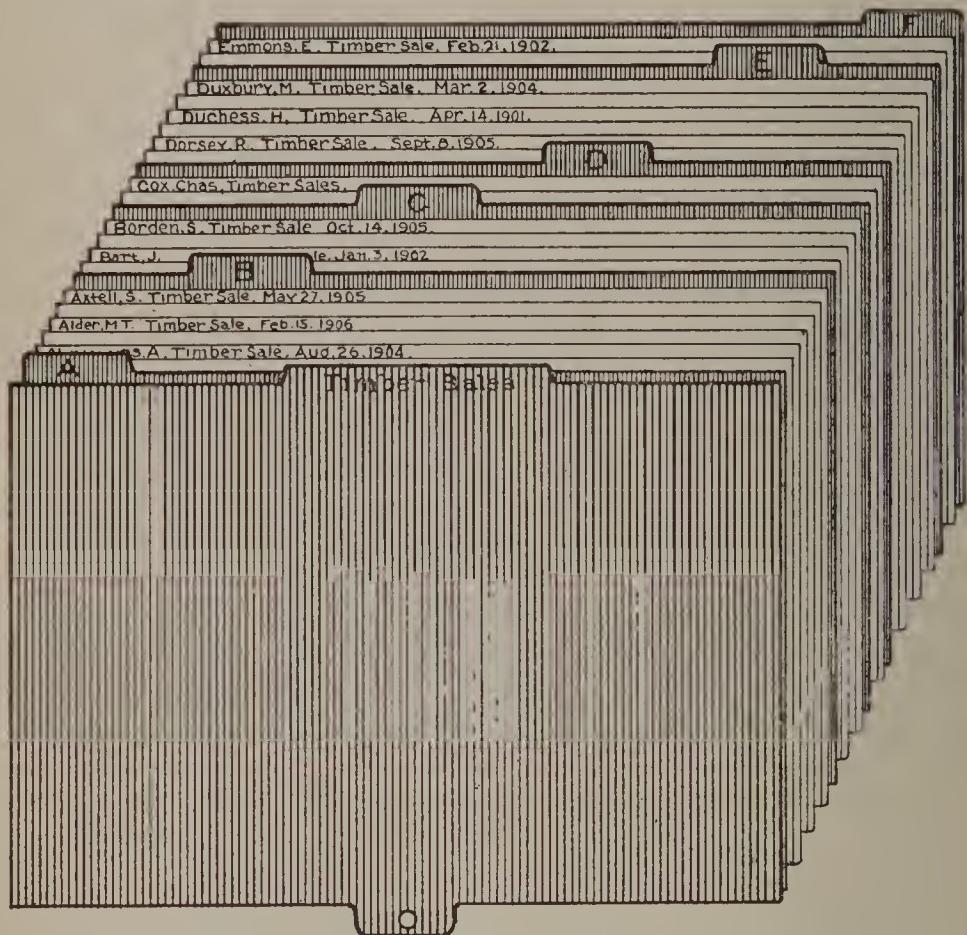


FIG. 3.—Use of folders in section 2—Transactions designated.

drawer will be used for filing forest reserve orders and one for reports of rangers other than of service and not relating to a particular designated case and for copies of special reports to the Forester; no indexes will be furnished for these drawers. Two of the six remaining drawers will be used for filing letters from the Office of the Forester relating to administrative subjects and not to particular designated cases; the other four will be used for filing

correspondence with rangers and other forest officers with whom the supervisor carries on a regular correspondence. These six drawers will be supplied with special indexes containing twelve blank guides each, upon the tabs of which should be written the subject into which the business of the reserve is divided and the names of the forest officers. (See fig. 5.)

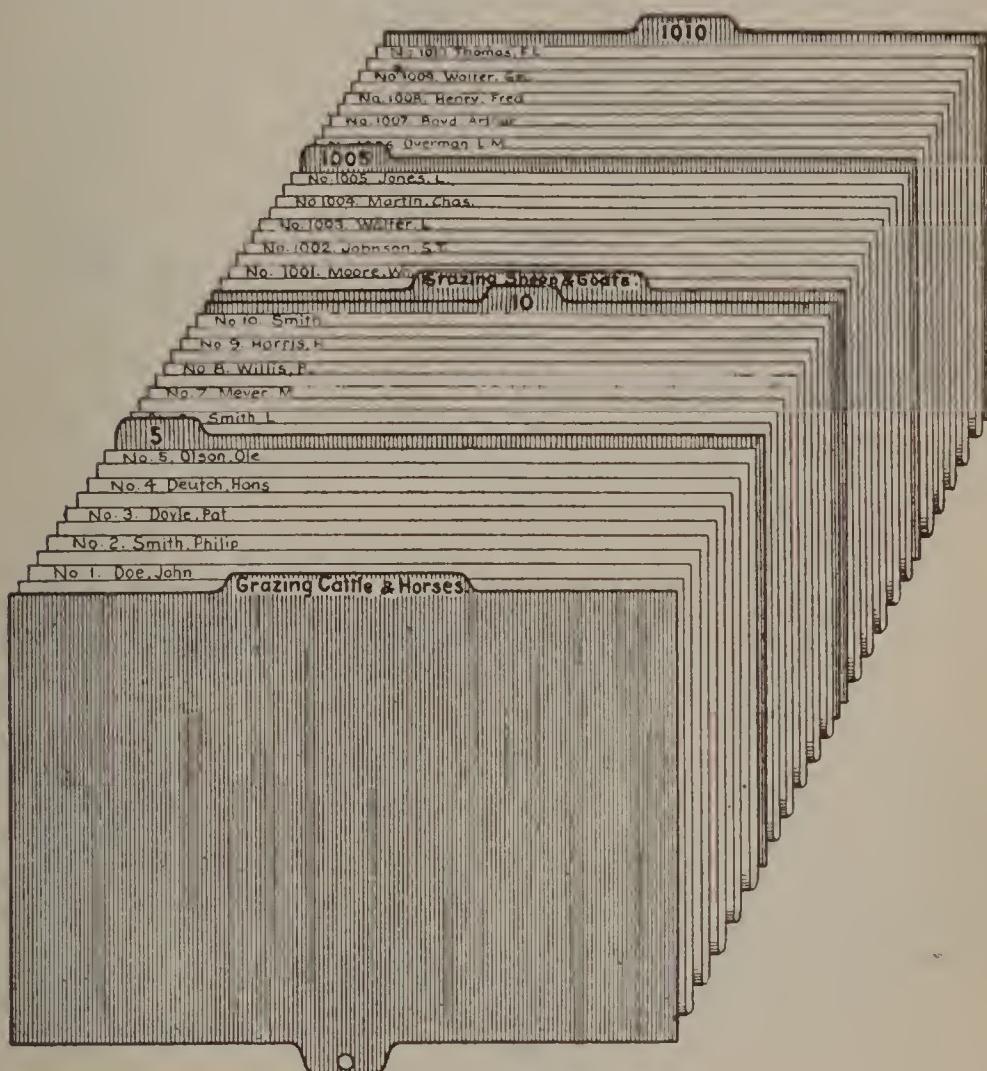


FIG. 4.—Use of folders in section 2—Grazing cases numbered.

Section 4: Since all correspondence and printed forms will be filed open and flat, this section will be used, where already furnished, for filing rangers' service reports only, and will not be furnished in the future. When section 4 is not included in the filing case, the rangers' service reports will be filed in one of the drawers in the correspondence unit, section 3.

CARD RECORD CASE.

The supervisors' filing case (section 2) is supplemented by the 2-drawer (4" by 6") card-record case. In this the card records will be kept. Subject guide cards with the following printed headings will be used: "Personnel," "Timber sales," "Timber Set-

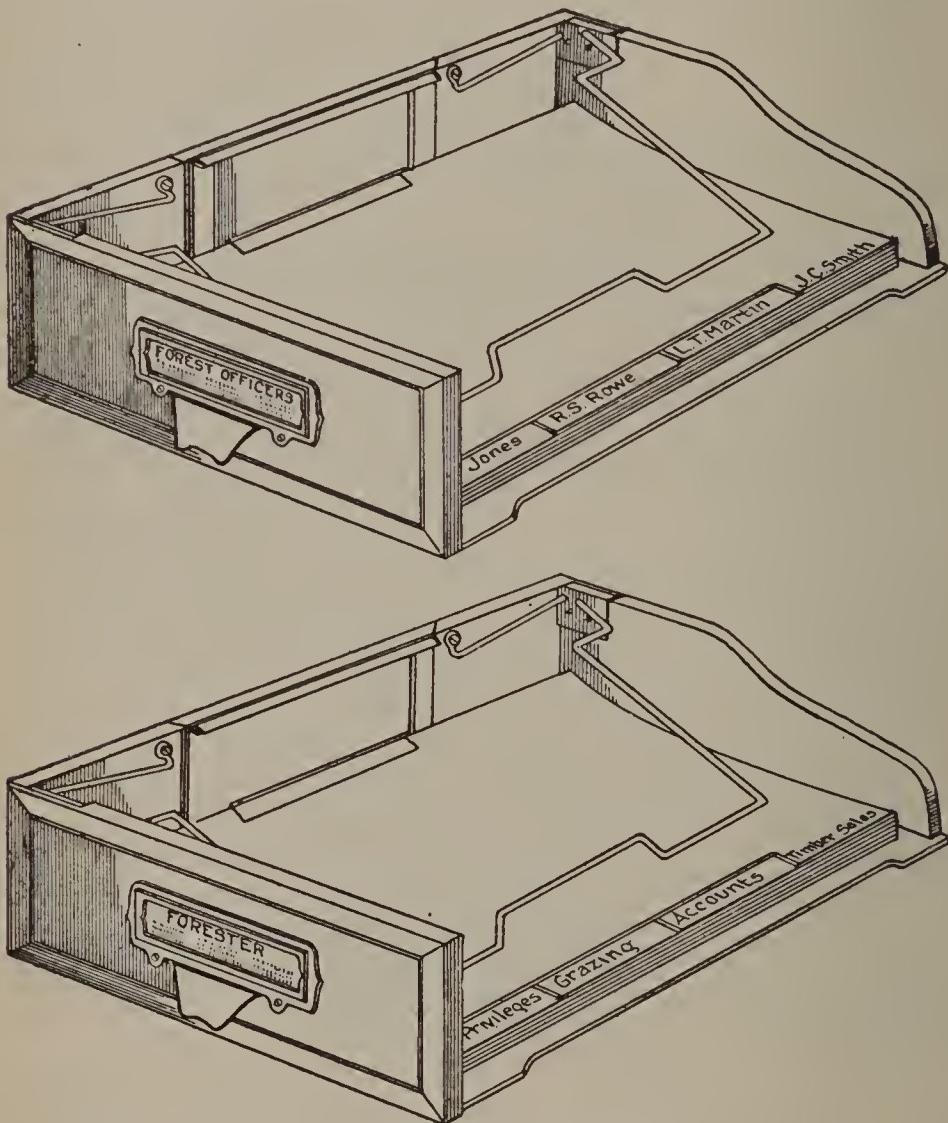


FIG. 5.—Filing drawers for correspondence in section 5.

tlements," "Free use," "Privileges," "Claims," "Trespass," "Grazing—cattle and horses," and "Grazing—sheep and goats." All record cards will be filed alphabetically behind their respective subject guide cards. When warranted by the number of cards under any subject, alphabetical (A to Z) guide cards may be used.

TRANSFER CASES.

The 2-drawer vertical unit (section 2) will be supplemented by cardboard transfer cases, which will be without indexes. They will be numbered consecutively in series as used. When a sale, privilege, or other transaction is officially closed, the folder containing all the papers will be removed from the file and placed in the last numbered transfer case. Each transfer case will hold from four to ten folders, according to the number of papers and letters involved, and the order in which the folders are filed is immaterial, since it will be comparatively easy among so few to find a particular folder if its designation is known. As an index to the closed and transferred cases, the words "Closed ——, Tr. No. ——" will be placed along the top margin of the record card with a rubber stamp. To this will be added in writing the date the folder is transferred and the number of the transfer case. The card record will not be transferred, but will retain its proper place in the card-record drawer.

The drawers for filing correspondence and reports (section 3) will be supplemented by cardboard transfer cases. These will be furnished with indexes identical with those in the drawers. When a correspondence drawer becomes so full as to be inconvenient for handling, the entire contents, including the index, will, by means of the metal attachment, be removed bodily from the drawer and placed in a transfer case, from which the empty index has first been removed in a similar manner. The empty index will be inserted in the drawer, which will then be ready for continued use. These transfer cases will also be numbered consecutively in a separate series. The number on the case to which the correspondence is transferred, with the opening and closing dates of the period covered by the correspondence, will be entered in the blank pasted on the bottom of the drawer.

The guide cards, folders, transfer cases, and rubber stamp required to carry out these instructions will be furnished on requisition to the Forester.

SYSTEM OF IDENTIFYING TRANSACTIONS.

Forest reserve transactions, to facilitate their identification and the filing of records, will be divided into the following subjects: Timber sales, free use, privileges, claims, trespass, and grazing.

For the complete identification of each particular transaction under these subjects the following system of designations will be used in filling in printed forms and card records, referring to the particular transaction in letters, and labeling document folders for section 2 of the supervisors' filing cases.

Under timber sales.—By name of applicant, subject, date of application, and name of reserve. Thus:

“John Jones, timber sale, February 15, 1906, Shawnee Forest Reserve.”

Under timber settlements.—By the name of the applicant, subject, kind of privilege, date of application, and name of forest reserve. Thus:

“John Jones, timber settlement, reservoir, February 15, 1906, Shawnee Forest Reserve.”

“John Jones, timber settlement, reservoir (Interior), February 15, 1906, Shawnee Forest Reserve.”

Under free use.—By name of applicant, subject, date of application, and name of reserve. Thus:

“John Jones, free use, February 15, 1906, Shawnee Forest Reserve.”

Under privileges.—By name of applicant, name of the privilege, date of application, and name of reserve. Thus:

“John Jones, sawmill, February 15, 1906, Shawnee Forest Reserve.”

“John Jones, apiary, February 15, 1906, Shawnee Forest Reserve.”

“John Jones, trapper's cabin, February 15, 1906, Shawnee Forest Reserve.”

“John Jones, agricultural, February 15, 1906, Shawnee Forest Reserve.”

“John Jones, reservoir, February 15, 1906, Shawnee Forest Reserve.”

“John Jones, aerial tramway, February 15, 1906, Shawnee Forest Reserve.”

“Great Northern Lumber Company, railway, February 15, 1906, Shawnee Forest Reserve.”

“John Jones, electric power line, February 15, 1906, Shawnee Forest Reserve.”

The name of any other privilege applied for will be used instead of those given above.

In designating privileges granted by the Secretary of the Interior the word "Interior" will be inserted in parentheses after the name of the privilege. Thus:

"John Jones, reservoir (Interior), February 15, 1906, Shawnee Forest Reserve."

On the folder and record card (Form 619) the word "Interior" will be written in the upper right-hand corner.

Under trespass.—By name of trespasser, kind of trespass, date of "report of trespass," and name of reserve. Thus:

"John Jones, timber trespass, February 15, 1906, Shawnee Forest Reserve."

"John Jones, privilege trespass, February 15, 1906, Shawnee Forest Reserve."

"John Jones, grazing trespass, February 15, 1906, Shawnee Forest Reserve."

Any trespass other than timber and grazing will be designated as a "privilege trespass."

Under claims.—By name of claimant or mine, kind of claim, and name of reserve. Thus:

"John Jones, homestead settlement, Garfield land district, Shawnee Forest Reserve."

"John Jones, homestead entry 35412, final certificate 7896, Garfield land district, Shawnee Forest Reserve."

"John Jones, desert-land entry 53124, final certificate 9867, Garfield land district, Shawnee Forest Reserve."

"John Jones, timber and stone, sworn statement 14352, entry 8697, Garfield land district, Shawnee Forest Reserve."

"John Jones, forest reserve lieu selection 41345, Garfield land district, Shawnee Forest Reserve."

"John Jones, soldiers' additional application, final certificate 8769, Garfield land district, Shawnee Forest Reserve."

"John Jones, coal declaratory statement 34125, entry 25143, Garfield land district, Shawnee Forest Reserve."

"Kitty B. placer claim, John Jones, mineral location, Garfield land district, Shawnee Forest Reserve."

"Kitty B. placer claim, John Jones, mineral application 324, mineral entry 452, Garfield land district, Shawnee Forest Reserve."

"Golden Gate lode claim, John Jones, mineral location, Garfield land district, Shawnee Forest Reserve."

"Golden Gate lode claim, John Jones, mineral application 324, mineral entry 254, Garfield land district, Shawnee Forest Reserve."

Forest officers will designate claims according to their status at the time of investigation or report, and always use the proper land office numbers when known. They will complete the record on cards and folders from time to time as such numbers become known. Land office abbreviations may be used.

Under grazing.—By name of applicant, subject, number of application, and name of reserve. Thus:

"John Jones, grazing No. 10, Shawnee Forest Reserve."

In reserves where both cattle and horses and sheep and goats are allowed, the cattle and horse applications will begin each season with No. 1, and the sheep and goat applications with a number, such as 301, 501, 1001, etc., which is certain to be above the highest number given any cattle and horse grazing application for the same reserve. Each permit will be given the same number as the application on which it is based.

Serial numbering is discontinued, except in grazing.

THE FOREST SERVICE UPON FOREST RESERVES.

ORGANIZATION.

The permanent field force of the forest reserves now contains the grades of forest inspector, assistant forest inspector, forest supervisor, deputy forest supervisor, forest assistant, forest ranger, deputy forest ranger, assistant forest ranger, and forest guard.

Except in the cases of forest inspector, assistant forest inspector, and forest assistant, whose compensation will depend on varying circumstances, pay will be

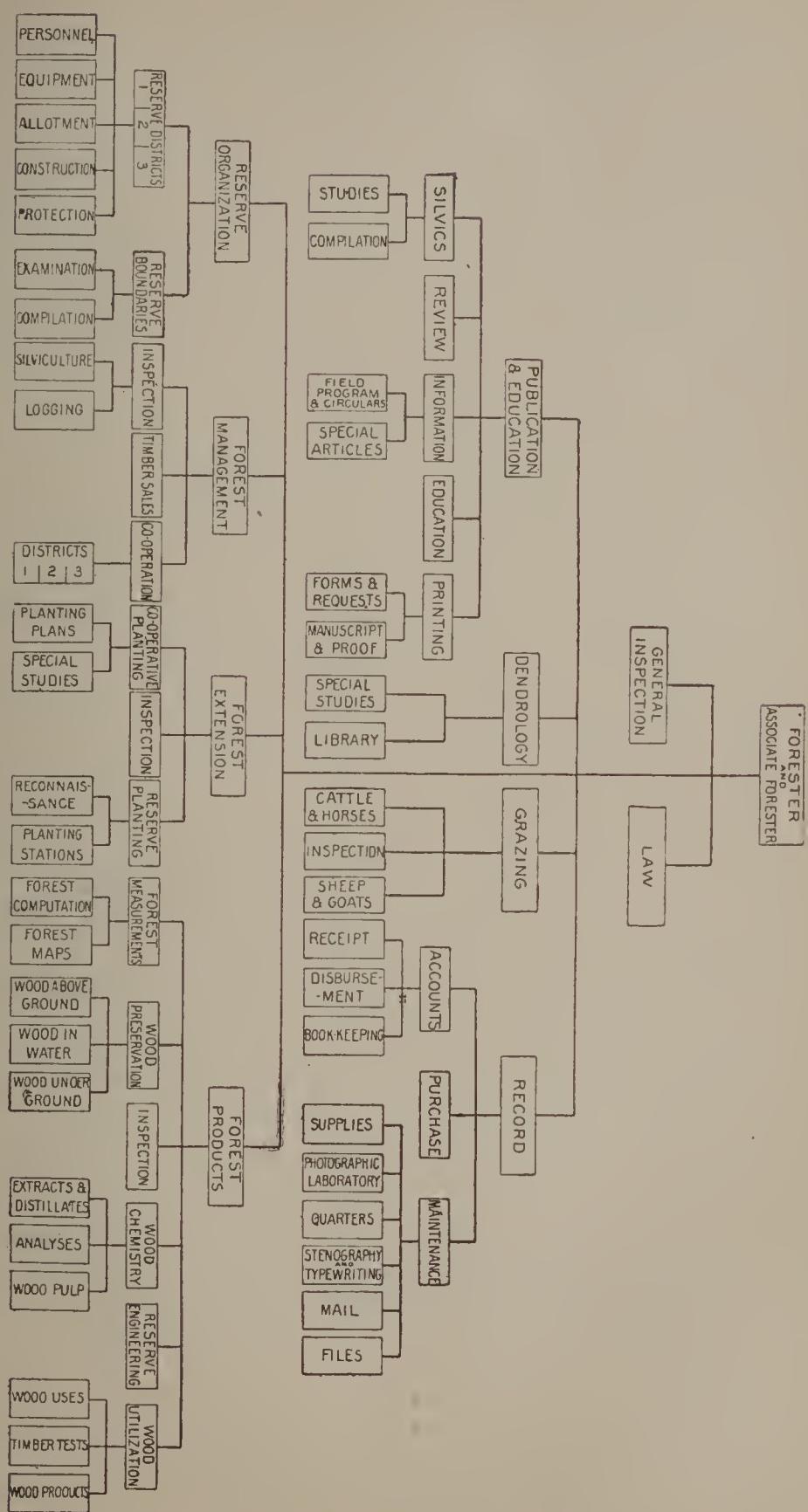


FIG. 6.—Organization of the Forest Service.

fixed as follows, as fast as the necessary funds are available and the promotions earned:

	Per year.
Forest supervisor	\$1,800 to \$2,500
Deputy forest supervisor	1,500 to 1,700
Forest ranger	1,200 to 1,400
Deputy forest ranger	1,000 to 1,000
Assistant forest ranger	800 to 900
Forest guard	600 to 720

EXAMINATIONS.

In accordance with the law requiring the selection of rangers and supervisors, when practicable, from the States and Territories in which they are to be employed (Appendix, p. 161), and the President's order placing them under the civil-service rules, regular examinations for these positions are held as required in each State and Territory in which forest reserves are situated.

Examination for the position of forest ranger is along thoroughly practical lines and is supplemented by a field test to determine the applicant's fitness to do the actual work on the reserve. The Civil Service Commission appoints forest officers to conduct these examinations. Those for the position of forest supervisor are held by the regular civil-service examiners and only at large towns.

REG. 79. Only legal residents between the ages of 21 and 40 are eligible for the ranger or supervisor examinations. This qualification will not be waived under any circumstances.

Applicants are examined as to fitness for positions in the State or Territory of which they are legal residents.

Only when examinations fail to secure thoroughly qualified men are vacancies filled by the examination of applicants from other States.

The restriction as to residence is not imposed upon applicants for the forest assistant examination, for which the age limit is 20 to 40 years.

Information as to the times and places at which examinations will be held and the steps necessary to secure admission may be obtained only from the United States Civil Service Commission, Washington, D. C.

GENERAL QUALIFICATIONS AND DUTIES.

FOREST INSPECTORS.

Forest inspectors are appointed only from those who by their qualifications, training, and experience have gained great familiarity with reserve problems and unusual efficiency in the conduct of reserve business.

The inspector advises with all forest officers and has free access to all official books, reports, or other records. He may call upon any supervisor for all necessary assistance, but he has no authority to give orders to any supervisor or to any ranger, unless that ranger has been detailed by his superior to assist the inspector.

His duties are to inspect the reserves in his district, see and report on existing conditions, and recommend changes for the better in both the business and technical management, and in personnel. He also assists the local officers, by suggestion and advice, in all reserve matters.

SUPERVISORS.

For the purpose of encouraging good men to enter the service and do good work, as well as to utilize their

experience, appointments to the position of forest supervisor are made by the promotion of competent forest rangers or forest assistants, when they can be found in the State or Territory in which the vacancies exist. Should there be no thoroughly satisfactory resident forest rangers or forest assistants, examinations of other applicants are held.

The qualifications for the position of supervisor include all those required of rangers, as hereafter outlined, with superior technical, business, and administrative ability. Applicants should not only be familiar with every detail of the work of the rangers and with the conditions of the forest region involved, but should be able to handle men, to deal with all classes of persons who do business with the forest reserve management, and to conduct the transactions and correspondence of the office. Knowledge of technical forestry is most desirable, but not always essential. Candidates for the position of supervisor are required to furnish the most convincing proof of their moral and business responsibility.

While certain general qualifications are required in every case, special fitness for employment in a special region is always considered. In many heavily forested regions knowledge of timber and lumbering is more important than familiarity with the live-stock business, while the opposite is true in several reserves where grazing problems are numerous and little timber is sold.

Supervisors must give their entire time to the service. They have full charge of their reserves, plan and direct all work, have entire disposition of rangers and other

assistants, and are responsible for the efficiency of the local service. Under instructions from the Forester, supervisors deal with the public in all business connected with the sale of timber, the control of grazing, the issuing of permits, and the application of other regulations for the use and occupancy of forest reserves. They keep the records and accounts, and conduct the correspondence and general office business of their reserves, and make reports to the Forester on all matters under their jurisdiction.

Supervisors have authority to suspend or recommend the discharge of any subordinate employee, and also to recommend such changes in the field force as the good of the service may demand.

Each supervisor is required to keep at his own expense one or more horses, to be used under saddle or to vehicle, for his transportation in the reserve; and is allowed actual and necessary traveling expenses only when the urgency of the case requires some other means of transportation.

FOREST ASSISTANTS.

The position of forest assistant requires technical qualifications of high order, and entails an examination which no man may reasonably expect to pass unless he has been thoroughly trained in forestry and lumbering. Forest assistants may be assigned to any part of the United States, and must be competent to handle technical lines of work, such as the preparation of working plans and planting plans, the investigation of the silvics and uses of commercial trees, the study of wood preservation, and many other investigations requiring a trained forester.

When assigned to a forest reserve a forest assistant is placed directly under the supervisor, from whom he receives his orders and to whom he reports. If he has occasion to correspond with the Forester, he does so through the supervisor. He acts as technical assistant to the supervisor in all matters connected with the mapping, estimating, and disposal of timber, or other technical work. He should be detailed by the supervisor to general administrative business only when his technical services are not required.

Forest assistants are required to own and keep horses when necessary.

Supervisors having forest assistants will avail themselves fully and freely of the technical information thus placed at their disposal and are held responsible for so doing. Their services will be used in connection with the examination and reports on all applications for the purchase of timber and wood, and whenever practicable they will prepare the terms of the agreement and conduct the marking. They will assume general supervision, under the supervisor, of all lumbering operations. When not occupied with timber-sale cases their services may be used in mapping, estimating, and the preparation of working plans for reserve timber.

When the occasion arises the supervisor will delegate such authority over rangers to his technical assistant as is necessary to enable him to carry out his work.

RANGERS.

To be eligible as ranger of any grade the applicant must be, first of all, thoroughly sound and able-bodied,

capable of enduring hardships and of performing severe labor under trying conditions. Invalids seeking light out-of-door employment need not apply. No one may expect to pass the examination who is not already able to take care of himself and his horses in regions remote from settlement and supplies. He must be able to build trails and cabins, shoot, ride, pack, and deal tactfully with all classes of people. He must know something of land surveying, estimating and scaling timber, logging, land laws, mining, and the live-stock business.

On some reserves the ranger must be a specialist in one or more of these lines of work. Thorough familiarity with the region in which he seeks employment, including its geography and its forest and industrial conditions, is usually demanded, although lack of this may be supplied by experience in other similar regions.

The examination of applicants is along the practical lines indicated above, and actual demonstration, by performance, is required. Experience, not book education, is sought, although ability to make simple maps and write intelligent reports upon ordinary reserve business is essential.

For duty in Arizona and New Mexico the ranger must know enough Spanish to conduct reserve business with Mexicans.

Where boats, saddle horses, or pack horses are necessary in the performance of their duty, rangers are required to own and maintain them.

The Forest Service furnishes no personal or horse equipment.

The entire time of rangers must be given to the service. Engagement in any other occupation or employment is not permitted.

Rangers execute the work of the forest reserves under the direction of the supervisor. Their duties include patrol to prevent fire and trespass, estimating, surveying and marking timber, the supervision of cuttings, and other similar work. They issue minor permits, build cabins and trails, enforce grazing restrictions, investigate claims, report on applications, and arrest for violation of reserve laws and regulations.

Forest rangers may act as assistants to the supervisors. They have authority over deputy and assistant rangers and forest guards. They may be given charge of the field work of any portion of a reserve to which the supervisor is unable to give adequate personal supervision or of the whole reserve during periods when press of office work prevents the supervisor from taking the field.

When the absence of the supervisor requires some one in charge of his office, this duty falls on the forest ranger; although if there are more than one, or if there is a forest assistant attached to the reserve, the supervisor may detail whichever of these he thinks best, unless otherwise instructed by the Forester. No ranger is authorized to hire assistance himself except in cases of fire.

Deputy rangers and assistant rangers have charge of definite districts, to which they are assigned by the supervisor. They supervise forest guards stationed within their districts, and may also be given temporary laborers when necessary.

It is the policy to fill vacancies by promotion when competent men can be found, rather than by appointment of men without forest reserve experience, although otherwise well fitted.

REG. 80. Hereafter the promotion of forest officers on the reserves will be considered only once a year, and all promotions for the year will be made on January 1, except in cases where transfer or assignment entails greatly increased living expenses.

Recommendations for the promotion of their rangers received from supervisors before December 1 will be placed on file and not considered until that date.

ANNUAL RANGER MEETINGS.

In order to give the rangers the benefit of each other's experience, to keep them in touch with the entire work of the reserve, and to promote esprit de corps in the service, a general meeting of the entire force on each reserve should be held annually. The time and place of the meeting will be left to the discretion of the supervisor, who may combine with the supervisors of adjacent reserves. It is suggested that such meetings be held during the winter or in the spring shortly before the beginning of the fire season.

The supervisor should give a brief statement of the affairs of the reserve, an outline of the work accomplished in the past year, and of plans for the future, the idea being to give the rangers some knowledge of what is going on outside their immediate districts. He should especially invite discussion and suggestions. Any doubtful points on which a ranger desires information should be brought up and thoroughly discussed. Informal talks should be given by the forest assistant on technical problems, such as mapping and timber estimating, and instructions in the different systems of marking and in silvics should be supplemented by actual demonstration in the woods. Such topics as trail and bridge building, fire fighting, and brush burning should be thoroughly discussed and the rangers encouraged to give each other the advantage of their individual experience. The necessary transportation charges may be authorized on application to the Forester.

FOREST GUARDS.

In addition to the permanent classified force upon the reserves, forest guards receiving \$60 or less a month are employed under the following circumstances:

(a) When it is impossible to secure a permanent force of classified rangers for a reserve because there is no list, or an insufficient list, of eligibles qualified by examination and certification by the Civil Service Commission.

(b) When a reserve already has a permanent classified force, but requires for not over six months the services of additional men to perform the ordinary patrol and protective work of rangers.

Forest guards have the powers and duties of assistant forest rangers.

Where there is an eligible list of rangers who have not been appointed because of lack of vacancies in permanent positions, guards must be appointed from this list. Guards so appointed may be promoted to the position of ranger, should vacancies occur, at any time within one year from the date of notification that they have passed.

Where no eligible list exists forest guards may be appointed without examination, and may serve until a list is established through examination. Application for the position should be made to the supervisor, who will require sobriety, industry, physical ability, and effectiveness, and will give preference to local residents of whose fitness he is satisfied. Guards so appointed may serve until there is a list of eligibles for the position of ranger. If they pass this examination, they may continue to serve as guards or be appointed

rangers; if not, their appointments will be terminated, unless the eligible list is still insufficient to provide both rangers and guards.

Forest guards are required to own and keep horses when necessary.

In recommending the appointment of forest guards, supervisors will state the full names of the men desired, the date at which they are to begin work, and the necessity for their services. They should fully inform all applicants of the conditions under which they will serve. Guards must not begin work until the supervisor has been informed of the date on which their appointment takes effect.

Delay in payment of salary accounts is inevitable if the signature of the payee on the voucher is not identical with the payee's name as it appears in his appointment. Supervisors should prevent this by securing the written signature of each person to be appointed forest ranger or forest guard, and forwarding it to the Forester with the recommendation for his appointment. If it is necessary to make the recommendation by telegraph, mail the written signature when the telegram is sent.

Under certain circumstances temporary assistants may be employed directly by the supervisor (p. 123).

FOREST OFFICERS' RIGHT TO ENTER LAND.

Officers of the Forest Service are prohibited from entering, or becoming interested in, directly or indirectly, any of the public lands of the United States, with this exception: A forest officer may exercise his right under the town-site, homestead, or desert-land laws if he intends to make the claim his actual and permanent home. By so doing he takes his own risk of being compelled to choose between the claim and his position, should his duties make it impossible for him to comply with the residence and improvement requirements. Forest officers must not make application for the examination and listing of lands under the act of June 11, 1906. (Appendix, p. 175.)

SURVEYS WITHIN FOREST RESERVES.

The act of March 3, 1899, makes the surveying of forest reserve lands identical in all but the establishment of boundaries with that of the public domain. Where survey to permit the patenting of valid claims is desired, application should be made to surveyors-general, and action thereon will be governed by the usual considerations.

(For special surveys allowed in the forest reserves, see Appendix, p. 175.)

CREATION OF FOREST RESERVES—ADDITIONS AND ELIMINATIONS.

It is usually by Presidential proclamation that forest reserves are created, revoked, or modified in boundary; although, as a matter of course, Congress may take such action, and has done so in a few cases. (Appendix, pp. 157, 161, 165, 166.)

The boundaries of the earlier reserves were not always carefully drawn. In 1903 the need of better choice of reserve boundaries led to the establishment of a force of trained men devoted exclusively to this work, under a uniform and complete system of field study and report. The results were satisfactory, and the system remains in effect. Before any new forest reserve is created, or any change is made in the boundary of an existing reserve, a member of the Forest Service familiar with the work and with western conditions makes a careful investigation, not only of the lands, but also of the interests involved. The claims of all industries and classes of residents are weighed, in order that no injustice may be done.

The region is carefully mapped and described, and the boundary of the reserve is drawn to include only suitable reserve land. Possible agricultural areas are always excluded unless they are small and isolated.

In some cases areas temporarily withdrawn from entry, pending examination, contain land unsuitable for forest reserves, and their withdrawal is viewed with alarm by local residents. It should be remembered that such withdrawals are not final, and that unsuitable portions will be restored to the public domain.

All communications relating to the creation of forest reserves or to changes in their boundaries should be addressed to the Forester, Forest Service, Washington, D. C.

Whenever a supervisor decides that there should be a change in the boundary of his reserve he should report the area recommended for examination by townships and sections if possible, accompanying his report by an outline map. If an addition is recommended, he should state exactly what area, if any, should be withdrawn from settlement pending field examination.

APPENDIX.

STATUTES.

Creation and Administration of Forest Reserves.

CREATION.

ACT OF MARCH 3, 1891 (26 STAT., 1095).

SEC. 24. That the President of the United States may, from time to time, set apart and reserve, in any State or Territory having public land bearing forests, in any part of the public lands wholly or in part covered with timber or undergrowth, whether of commercial value or not, as public reservations, and the President shall, by public proclamation, declare the establishment of such reservations and the limits thereof.

ADMINISTRATION AND MODIFICATION.

ACT OF JUNE 4, 1897 (30 STAT., 34-36).

* * * * *

All public lands heretofore designated and reserved by the President of the United States under the provisions of the act approved March third, eighteen hundred and ninety-one, the orders for which shall be and remain in full force and effect, unsuspended and unrevoked, and all public lands that may hereafter be set aside and reserved as public forest reserves under said act, shall be as far as practicable controlled and administered in accordance with the following provisions:

No public forest reservation shall be established, except to improve and protect the forest within the reservation, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States; but it is not the purpose or intent of these provisions, or of the act providing for such reservations, to authorize the inclusion therein of lands more valuable for

Forest reservations, when to be established.

the mineral therein, or for agricultural purposes, than for forest purposes.

Provisions for protection against fire, etc. The Secretary of the Interior shall make provisions for the protection against destruction by fire and depredations upon the public forests and forest reservations which may have been set aside or which may be hereafter set aside under the

said act of March third, eighteen hundred and ninety-one, and which may be continued; and he may make such rules and regulations and establish such service as will insure

Rules and regulations. the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction; and any violation of the provisions of this act or such rules and regulations shall be

Penalty. punished as is provided for in the act of June fourth, eighteen hundred and eighty-eight, amending section fifty-three hundred and eighty-eight of the Revised Statutes of the United States. (See page 182.)

Timber. For the purpose of preserving the living and growing timber and promoting the younger growth on forest reservations, the Secretary of the Interior, under such rules and regulations as he shall prescribe, may cause to be designated and appraised so much of the dead, matured, or large growth of trees found upon such forest reservations as may be compatible with the utilization of the forests thereon, and may sell the same for not less than the appraised value in such quantities to each purchaser as he shall prescribe, to be used in the State or Territory in which such timber reservation may be situated, respectively; but not for export therefrom (but see p. 163).^a

* * * *

Sale of timber.
Advertisement.

“Before such sale shall take place notice thereof shall be given by the Commissioner of the General Land Office, for not less than thirty days, by publication in one or more newspapers of general circulation, as he may deem necessary, in the State or Territory where such reservation exists: *Provided, however,* That in cases of unusual emergency the

Provisos. **Emergency, etc., sales in advance of advertisement.** Secretary of the Interior may, in the exercise of his discretion, permit the purchase of timber and cord wood in advance of advertisement of sale at rates of value approved by him and subject to payment of the full amount of the highest bid resulting from the

^aThe stars indicate the omission of the timber sale advertisement provisions of the act of June 4, 1897, as modified by the act of June 6, 1900 (31 Stat. 661), and repealed by the Agricultural appropriation act for 1907.

usual advertisement of sale: *Provided further*, That he may, in his discretion, sell without advertisement, in quantities to suit applicants, at a fair appraisement, timber and cord wood not exceeding in value one hundred dollars stumpage: *And provided*

further, That in cases in which advertisement

Private sale where bid unsatisfactory, etc. is had and no satisfactory bid is received, or in cases in which the bidder fails to com-

plete the purchase, the timber may be sold, without further advertisement, at private sale, in the discretion of the Secretary of the Interior, at not less than the appraised valuation, in quantities to suit purchasers,"^a payments for such

timber to be made to the receiver of the local

Payments, how made. land office of the district wherein said timber may be sold, under such rules and regulations

as the Secretary of the Interior may prescribe; and the moneys arising therefrom shall be accounted for by the receiver of such land office to the Commissioner of the General Land Office, in a separate account, and shall be covered into the Treasury. Such

timber, before being sold, shall be marked and

Cutting and removal. designated, and shall be cut and removed under the supervision of some person appointed for

that purpose by the Secretary of the Interior, not interested in the purchase or removal of such timber nor in the employment of the purchaser thereof. Such supervisor shall make report in writing to the Commissioner of the General Land Office and to the receiver in the land office in which such reservation shall be located of his doings in the premises.

The Secretary of the Interior may permit, under regulations to

Free use of timber, etc., by settlers, etc. be prescribed by him, the use of timber and stone found upon such reservations, free of charge, by bona fide settlers, miners, residents, and prospectors for minerals, for firewood, fencing, buildings, mining, prospecting, and other domestic purposes, as may be needed by such persons for such purposes; such timber to be used within the State or Territory, respectively, where such reservations may be located.

Nothing herein shall be construed as prohibiting the egress or

Egress and ingress of settlers residing within reservations, etc. ingress of actual settlers residing within the boundaries of such reservations, or from crossing the same to and from their property or homes; and such wagon roads and other im-

provements may be constructed thereon as may be necessary to reach their homes and to utilize their property under such rules

^a The matter in quotation marks is taken bodily from the act of June 6, 1900 (31 Stat. 661), and, since the passage of the Agricultural appropriation act for 1907, is the timber-sale law for all forest reserves. (Appendix, p. 162.)

and regulations as may be prescribed by the Secretary of the Interior. Nor shall anything herein prohibit any person from Prospecting, etc. entering upon such forest reservations for all proper and lawful purposes, including that of prospecting, locating, and developing the mineral resources thereof: *Provided*, That such persons comply with the rules and regulations covering such forest reservations.^a

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The settlers residing within the exterior boundaries of such forest reservations, or in the vicinity thereof, Schools and churches. may maintain schools and churches within such reservation, and for that purpose may occupy any part of the said forest reservation, not exceeding two acres for each schoolhouse and one acre for a church.

The jurisdiction, both civil and criminal, over persons within such reservations shall not be affected or changed by reason of the existence of such reservations, except so far as the punishment of offenses against the United States therein is concerned; the intent and meaning of this provision being that the State wherein any such reservation is situated shall not, by reason of the establishment thereof, lose its jurisdiction, nor the inhabitants thereof their rights and privileges as citizens, or be absolved from their duties as citizens of the State.

All waters on such reservations may be used for domestic mining, milling, or irrigation purposes, under the Waters. laws of the State wherein such forest reservations are situated, or under the laws of the United States and the rules and regulations established thereunder.

Upon the recommendation of the Secretary of the Interior, with the approval of the President, after sixty days' notice thereof, published in two papers of general circulation in the State or Territory wherein any forest reservation is situated, and near the said reservation, any public lands embraced within the limits of any forest reservation which, after due examination by personal inspection of a competent person appointed for that purpose by the Secretary of the Interior shall be found better adapted for mining or for agricultural purposes than for forest usage, may be restored to the public domain. And any mineral lands in any forest reservation which have been or which may be shown to be such, and subject to entry under the existing mining laws of the United States and the rules and regulations

^a The stars indicate the omission of the lieu-selection law which was repealed by the act of March 3, 1905 (33 Stat. 1264).

applying thereto, shall continue to be subject to such location and entry, notwithstanding any provisions herein contained.

The President is hereby authorized at any time to modify any Executive order that has been or may hereafter be made establishing any forest reserve, and by such modification may reduce the area or change the boundary lines of such reserve, or may vacate altogether any order creating such reserve.

TRANSFER OF FOREST RESERVES.

ACT OF FEBRUARY 1, 1905 (33 STAT., 628).

The Secretary of the Department of Agriculture shall, from and after the passage of this act, execute or cause to be executed all laws affecting public lands heretofore or hereafter reserved under the provisions of section twenty-four of the act entitled "An act to repeal the timber-culture laws, and for other purposes," approved March third, eighteen hundred and ninety-one, and acts supplemental to and amendatory thereof, after such lands have been so reserved, excepting such laws as affect the surveying, prospecting, locating, appropriating, entering, relinquishing, reconveying, certifying, or patenting of any of such lands.

Exportation from Alaska. SEC. 2. That pulp wood or wood pulp manufactured from timber in the district of Alaska may be exported therefrom.

Forest supervisors and rangers. SEC. 3. That forest supervisors and rangers shall be selected, when practicable, from qualified citizens of the States or Territories in which the said reserves, respectively, are situated.

Mining and municipal rights of way. SEC. 4. That rights of way for the construction and maintenance of dams, reservoirs, water plants, ditches, flumes, pipes, tunnels, and canals within and across the forest reserves of the United States are hereby granted to citizens and corporations of the United States for municipal or mining purposes, and for the purposes of the milling and reduction of ores, during the period of their beneficial use, under such rules and regulations as may be prescribed by the Secretary of the Interior, and subject to the laws of the State or Territory in which said reserves are respectively situated.

Special fund. SEC. 5. That all money received from the sale of any products or the use of any land or resources of said forest reserves shall be covered into the Treasury of the United States and for a period of five years from the passage of this act shall constitute a special fund available, until expended, as the Secretary of Agriculture may

direct, for the protection, administration, improvement, and extension of Federal forest reserves.

NOTE.—The Department of Agriculture and the Department of the Interior have concurred in the opinion that the above law divides the jurisdiction over forest reserves as follows: All grants of rights or privileges within forest reserves, which do not affect the title to the land or cloud the fee, are under the jurisdiction of the Secretary of Agriculture. All grants which dispose of title to or give an easement running with the land are under the jurisdiction of the Secretary of the Interior.

AGRICULTURAL APPROPRIATION ACT FOR 1907.

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General expenses, Forest Service: To enable the Secretary of Agriculture to experiment and to make and continue investigations and report on forestry, forest reserves, forest fires, and lumbering; to advise the owners of woodlands as to the proper care of the same; to investigate and test American timber and timber trees, and their uses, and methods for the preservative treatment of timber; to seek, through investigations and the planting of native and foreign species, suitable trees for the treeless regions; to erect necessary buildings: <i>Provided</i> , That the cost of any building erected shall not exceed one thousand dollars; for all expenses necessary to protect, administer, improve, and extend the national forest reserves, and officials of the Forest Service designated by the Secretary of Agriculture shall, in all ways that are practicable, aid in the enforcement of the laws of the States or Territories with regard to stock, for the prevention and extinguishment of forest fires, and for the protection of fish and game.	Experiments and investigations in forestry.
Timber testing.	
Tree planting.	
Cost of buildings.	
Forest reserves.	
State stock, game, and fire laws.	
That the forest-reserve special fund provided for in section five of the act approved February first, nineteen hundred and five, entitled "An act providing for the transfer of forest reserves from the Department of the Interior to the Department of Agriculture," shall continue until otherwise provided by law; but after June thirtieth, nineteen hundred and eight, it shall not be expended except in accordance with specific estimates of expenditures to be made from said fund for the succeeding fiscal year, to be submitted by the Secretary of Agriculture with the estimates of appropriation in the annual Book of Estimates.	Forest reserve special fund.

That ten per centum of all money received from each forest reserve during any fiscal year, including the year ending June thirtieth, nineteen hundred and six, shall be paid at the end thereof by the Secretary of the Treasury to the State or Territory in which said reserve is situated, to be expended as the State or Territorial legislature may prescribe for the benefit of the public schools and public roads of the county or counties in which the forest reserve is situated: *Provided*, That when any forest reserve is in more than one State or Territory or county the distributive share to each from the proceeds of said

Ten per cent of receipts to be paid to States and Territories for use of counties.

expended as the State or Territorial legislature may prescribe for the benefit of the public schools and public roads of the county or counties in which the forest reserve is situated: *Provided*, That when any forest reserve is in more than one State or Territory or county the distributive share to each from the proceeds of said

Not to exceed 40 per cent of other county income.

of the total income of such county from all other sources.

For ascertaining the natural conditions upon and for utilizing the national forest reserves; and the Secretary of Agriculture may, in his discretion, permit timber and other forest products cut or removed from the forest reserves of the United States, except the Black Hills Forest Reserve in South Dakota, to be exported from the State, Territory,

or the district of Alaska, in which said reserves are respectively situated: *Provided*, That the exportation of dead and insect-infested timber only from said Black Hills Forest Reserve shall be allowed until such time as the Forester shall certify

Dead and insect-infested timber, Black Hills.
that the ravages of the destructive insects in said reserve are practically checked, but in no case after July first, nineteen hundred and eight; and hereafter sales of timber on forest reserves in the State of California shall in every respect conform to the law governing

Timber-sales rules made uniform.
such sales in other States, as set forth in the act of June sixth, nineteen hundred and sixteen (Thirty-first Statutes at Large, page six hundred and sixty-one); and hereafter all moneys received as deposits to secure the purchase price on the sale of any products or the use of any

Deposit of forest reserve receipts.
land or resources of the forest reserves shall be covered into the Treasury in the manner provided by section five of the act of Congress approved February first, nineteen hundred and five, entitled "An act providing for the transfer of forest reserves from the Department of the Interior to the Department of Agriculture," and the fund created by that act shall be available, as the Secretary of Agriculture may direct, to make refunds to depositors of money heretofore or hereafter deposited by them in excess of amounts actually

Cooperative contributions.
due to the United States; and hereafter all moneys received as contributions toward cooperative work in forest investigations

Refunds.

shall be covered into the Treasury and shall constitute a special fund, which is hereby appropriated and made available until expended, as the Secretary of Agriculture may direct,

Refunds. for the payment of the expenses of said investigations by the Forest Service and for refunds

hereafter paid in by them in excess of their share of the cost of said investigations; for the employment of fiscal

Employees. and other agents, clerks, assistants, and other labor required in practical forestry, in the administration of forest reserves, and in conducting experiments

Sale of photographs, etc. and investigations in the city of Washington and elsewhere; and he may dispose of photographic prints (including bromide enlargements), lan-

tern slides, transparencies, blueprints, and forest maps at cost and ten per centum additional, and condemned property or materials under his charge in the same manner as pro-

Printing. vided by law for other bureaus; for collating, digesting, reporting, illustrating, and printing the results of such experiments and investiga-

Purchase of supplies, etc. tions; and for the purchase of all necessary supplies, apparatus, office fixtures, law books

to an amount not exceeding five hundred dollars; for freight, express, telegraph, and telephone charges, electric light and power, fuel, gas, ice, washing towels, and traveling and other necessary expenses. * * * And the employees of the Forest Service outside of the city of Washington may, in the discretion of the

Secretary of Agriculture, without additional expense to the Government, be granted leaves

Annual leave. of absence not to exceed fifteen days in any one year, which leave may, in exceptional and meritorious cases where such an employee is

Sick leave. ill, be extended, in the discretion of the Secretary of Agriculture, not to exceed fifteen days additional in any one year.

TIMBER FOR RECLAMATION SERVICE.

ACT OF FEBRUARY 8, 1905 (33 STAT., 706).

In carrying out the provisions of the national irrigation law, approved June seventeenth, nineteen hundred and two, and in constructing works thereunder, the Secretary of the Interior is hereby authorized to use and to permit the use by those engaged in the construction of works under said law, under rules and regulations to be prescribed by him, such earth, stone, and timber from the public lands of the United States as may be re-

Reclamation Service may use material from forest reserves.

quired in the construction of such works, and the Secretary of Agriculture is hereby authorized to permit the use of earth, stone, and timber from the forest reserves of the United States for the same purpose, under rules and regulations to be prescribed by him.

MINNESOTA NATIONAL FOREST RESERVE.

NOTE.—Act of June 27, 1902 (32 Stat., 400), provides for the creation of a forest reserve from the ceded Chippewa Indian lands in Minnesota.

YOSEMITE PARK AND SIERRA RESERVE.

ACT OF FEBRUARY 7, 1905 (33 STAT., 702).

Part of the Yosemite National Park added to the Sierra Forest Reserve. The tracts of lands in the State of California known and described as follows:

* * * * *

are hereby reserved and withdrawn from settlement, occupancy, or sale under the laws of the United States, and set apart as reserve forest lands, subject to all the provisions of the act of Congress approved October first, eighteen hundred and ninety, entitled "An act to set apart certain tracts of land in the State of California as forest reservations:" *Provided*, That all those tracts or parcels of land described in section one of the said act of October first, eighteen hundred and ninety, and not included within the metes and bounds of the land above described, be, and the same are hereby, included in and made part of the Sierra Forest Reserve: *And provided further*, That the Secretary of the Interior may

Secretary of the Interior authorized to charge. require the payment of such price as he may deem proper for privileges on the land herein segregated from the Yosemite National Park

and made a part of the Sierra Forest Reserve accorded under the act approved February fifteenth, nineteen hundred and one, relating to rights of way over certain parks, reservations, and other lands, and other acts concerning rights of way over public lands; and the moneys received from the privileges accorded on the lands herein segregated and included in the

Sierra Forest Reserve shall be paid into the Treasury of the United States, to be expended, under the direction of the Secretary of the Interior,

Special fund. in the management, improvement, and protection of the forest lands herein set aside and reserved, which shall hereafter be known as the "Yosemite National Park."

* * * * *

UINTA FOREST RESERVE.

ACT OF MARCH 3, 1905 (33 STAT., 1070).

That before the opening of the Uintah Indian Reservation the President is hereby authorized to set apart and reserve as an addition to the Uintah Forest Reserve, subject to the laws, rules, and regulations governing forest reserves, and subject to the mineral rights granted by the act of Congress of May twenty-seventh, nineteen hundred and two, such portion of the lands within the Uintah Indian Reservation as he considers necessary, and he may also set apart and reserve any reservoir site or other lands necessary to conserve and protect the water supply for the Indians or for general agricultural development, and may confirm such rights to water thereon as have already accrued: *Provided*, That the proceeds from any timber on such addition as may with safety be sold prior to June thirtieth, nineteen hundred and twenty, shall be paid to said Indians in accordance with the provisions of the act opening the reservation.

President to proclaim addition to the Uinta Forest Reserve.

Rights and Privileges Within Forest Reserves.

CONTRACTS NONASSIGNABLE.

REVISED STATUTES, SECTION 3737.

No contract or order, or any interest therein, shall be transferred by the party to whom such contract or order is given to any other party, and any such transfer shall cause the annulment of the contract or order transferred, so far as the United States are concerned. All rights of action, however, for any breach of such contract by the contracting parties, are reserved to the United States.

RAILROADS.

ACT OF MARCH 3, 1875 (18 STAT., 482).

The right of way through the public lands of the United States is hereby granted to any railroad company duly organized under the laws of any State or Territory, except the District of Columbia, or by the Congress of the United States, which shall have filed with the Secretary of the Interior a copy of its articles of incorporation, and due proofs of its organization under the same, to the extent of one hundred feet on each side of the central line of said road; also the right to take, from the public lands ad-

Right of way for railroads granted through public lands.

Width of right of way.

jacent to the line of said road, material, earth, stone, and timber necessary for the construction of said railroad; also ground adjacent to such right of way for station buildings, depots, machine shops, side tracks, turn-outs, and water stations, not to exceed in amount twenty acres for each station, to the extent of one station for each ten miles of its road.

SEC. 2. That any railroad company whose right of way, or whose track or roadbed upon such right of way, passes through any canyon, pass, or defile, shall not prevent any other railroad company from the use and occupancy of said canyon, pass, or defile, for the purposes of its road, in common with the road first located, or the crossing of other railroads at grade. And the location of such right of way through any canyon, pass, or defile shall not cause the disuse of any wagon or other public highway now located therein, nor prevent the location through the same of any such wagon road or highway where such road or highway may be necessary for the public accommodation; and where any change in the location of such wagon road is necessary to permit the passage of such railroad through any canyon, pass, or defile, said railroad company shall, before entering upon the ground occupied by such wagon road, cause the same to be reconstructed at its own expense in the most favorable location, and in as perfect a manner as the original road: *Provided*, That such expenses shall be equitably divided between any number of railroad companies occupying and using the same canyon, pass, or defile.

SEC. 3. That the legislature of the proper Territory may provide for the manner in which private lands and possessory claims on the public lands of the United States may be condemned; and, where such provision shall not have been made, such condemnation may be made in accordance with section three of the act entitled "An act [to amend an act entitled an act] to aid in the construction of a railroad and telegraph line from the Missouri River to the Pacific Ocean, and to secure to the Government the use of the same for postal, military, and other purposes, approved July first, eighteen hundred and sixty-two," approved July second, eighteen hundred and sixty-four.

SEC. 4. That any railroad company desiring to secure the benefits of this act shall, within twelve months after the location of any section of twenty miles of its road, if the same be upon surveyed lands, and, if upon unsurveyed lands, within twelve months after the survey thereof by the United States, file with the register of the land office for the district where such land is located a profile of its road; and, upon approval thereof by the Secretary of the Interior, the same shall be noted upon

Filing of map.

Surveyed and un-surveyed lands.

Approval.

the plats in said office; and thereafter all such lands over which such right of way shall pass shall be disposed of subject to such right of way: *Provided*, That if any section of said road shall not be completed within five years after the location of said section, the rights herein granted shall be forfeited as to any such uncompleted section of said road.

Forfeiture. SEC. 5. That this act shall not apply to any lands within the limits of any military, park, or Indian reservation, or other lands specially reserved from sale, unless such right of way shall be provided for by treaty stipulation or by act of Congress heretofore passed.

SEC. 6. That Congress hereby reserves the right at any time to alter, amend, or repeal this act, or any part thereof.

ACT OF MARCH 3, 1899 (30 STAT., 1233).

In the form provided by existing law, the Secretary of the Interior may file and approve surveys and plats of any right of way for a wagon road, railroad, or other highway over and across any forest reservation or reservoir site when in his judgment the public interests will not be injuriously affected thereby.

IRRIGATION.

ACT OF MARCH 3, 1891 (26 STAT., 1101).^a

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SEC. 18. That the right of way through the public lands and reservations of the United States is hereby granted to any canal or ditch company formed for the purpose of irrigation and duly organized under the laws of any State or Territory, which shall have filed, or may hereafter file, with the Secretary of the Interior a copy of its articles of incorporation, and due proofs of its organization under the same, to the extent of the ground occupied by the water of the reservoir and of the canal and its laterals, and fifty feet on each side of the marginal limits thereof; also the right to take, from the public lands adjacent to the line of the canal or ditch, material, earth, and stone necessary for the construction of such canal or ditch: *Provided*, That no such right of way shall be so located as to interfere with the proper occupation by the Government of any such reservation, and all maps of location shall be subject to the approval of the department of the Government having jurisdiction of such reservation, and

Proviso.

Not to interfere with Government occupation.

^a This act was amended by act of May 11, 1898, sec. 2 (30 Stat., 404), quoted at p. 170.

the privilege herein granted shall not be construed to interfere with the control of water for irrigation and other purposes under authority of the respective States or Territories.

SEC. 19. That any canal or ditch company desiring to secure the

benefits of this act, shall, within twelve months

Maps to be filed. after the location of ten miles of its canal, if the

same be upon surveyed lands, and if upon un-

surveyed lands, within twelve months after the survey thereof by the United States, file with the register of the land office for the district where such land is located a map of its canal or ditch and

reservoir; and upon the approval thereof by

Approval. the Secretary of the Interior the same shall be noted upon the plats in said office, and there-

after all such lands over which such rights of way shall pass shall be disposed of subject to such right of way. Whenever any per-

son or corporation, in the construction of any canal, ditch, or reservoir, injures or damages the possession of

Damages. any settler on the public domain, the party committing such injury or damage shall be

liable to the party injured for such injury or damage.

SEC. 20. That the provisions of this act shall apply to all canals,

ditches, or reservoirs, heretofore or hereafter

Applicable to all canals, etc. constructed, whether constructed by corpora-

tions, individuals, or association of individuals,

on the filing of the certificates and maps herein provided for. If such ditch, canal, or reservoir, has been or shall be constructed by an individual or association of individuals, it shall be sufficient for such individual or association of individuals to file with the Secretary of the Interior, and with the register of the land office where said land is located, a map of the line of such canal, ditch, or reservoir, as in case of a corporation, with the name of the individual owner or owners thereof, together with the articles of association, if any there be. Plats heretofore filed shall have

ProvIso. the benefits of this act from the date of their filing, as though filed under it: *Provided*, That

if any section of said canal, or ditch, shall not

be completed within five years after the location of said section,

Forfeiture for non-completion. the rights herein granted shall be forfeited as

to any uncompleted section of said canal, ditch, or reservoir, to the extent that the same is not

completed at the date of the forfeiture.

SEC. 21. That nothing in this act shall authorize such canal or

ditch company to occupy such right of way ex-

Use only for canal. cept for the purpose of said canal or ditch, and

then only so far as may be necessary for the construction, maintenance, and care of said canal or ditch.

ACT OF MAY 11, 1898 (30 STAT., 404).

* * * *

SEC. 2. That the rights of way for ditches, canals, or reservoirs heretofore or hereafter approved under the provisions of sections eighteen, nineteen, twenty, and twenty-one of the act entitled "An act to repeal timber-culture laws, and for other purposes," approved March third, eighteen hundred and ninety-one, may be used for purposes of a public nature; and said rights of way may be used for purposes of water transportation, for domestic purposes, or for the development of power, as subsidiary to the main purpose of irrigation.

MUNICIPAL AND MINING.

ACT OF FEBRUARY 1, 1905 (33 Stat. 628).

* * * *

SEC. 4. That rights of way for the construction and maintenance of dams, reservoirs, water plants, ditches, flumes, pipes, tunnels, and canals, within and across the forest reserves of the United States, are hereby granted to citizens and corporations of the United States for municipal or mining purposes, and for the purposes of the milling and reduction of ores, during the period of their beneficial use, under such rules and regulations as may be prescribed by the Secretary of the Interior, and subject to the laws of the State or Territory in which said reserves are respectively situated.

* * * *

MEDICINAL SPRINGS.

ACT OF FEBRUARY 28, 1899 (30 STAT., 908).

The Secretary of the Interior * * * is hereby authorized, under such rules and regulations as he from time to time may make, to rent or lease to responsible persons or corporations applying therefor suitable spaces and portions of ground near, or adjacent to, mineral, medicinal, or other springs, within any forest reserves established within the United States, or hereafter to be established, and where the public is accustomed or desires to frequent, for health or pleasure, for the purpose of erecting upon such leased ground sanitaria or hotels, to be opened for the reception of the public. And he is further authorized to make such regula-

Pleasure and health resorts.

tions, for the convenience of people visiting such springs, with reference to spaces and locations, for the erection of tents or temporary dwelling houses to be erected or constructed for the use of those visiting such springs for health or pleasure. And the Secretary of the Interior is authorized to prescribe

Compensation provided for.

the terms and duration and the compensation to be paid for the privileges granted under the

provisions of this act.

SEC. 2. All funds arising from the privileges granted hereunder shall be covered into the Treasury of the United States as a special fund, to be expended in the care of public forest reservations.

ELECTRICITY AND WATER.

ACT OF FEBRUARY 15, 1901 (31 STAT., 790).

The Secretary of the Interior * * * is authorized and empowered, under general regulations to be fixed by him, to permit the use of rights of way through the public lands, forest and other reservations of the United States, and the Yosemite,

Licenses to be granted within forest reserves.

Sequoia, and General Grant national parks, California, for electrical plants, poles, and lines for the generation and distribution of electrical power, and for telephone and telegraph purposes, and for canals, ditches, pipes and pipe lines, flumes, tunnels, or other water conduits, and for water plants, dams, and reservoirs used to promote irrigation or mining or quarrying, or the manufacturing or cutting of timber and lumber, or the supplying of water for domestic, public, or any other beneficial uses to the extent of the ground occupied by such canals, ditches, flumes, tunnels, reservoirs, or other water conduits or water plants, or electrical or other works

Width of right of way. permitted hereunder, and not to exceed fifty feet on each side of the marginal limits thereof, or not to exceed fifty feet on each side of the

center line of such pipes and pipe lines, electrical, telegraph, and telephone lines and poles, by any citizen, association, or corporation of the United States, where it is intended by such to exercise the use permitted

Licenses must not be incompatible with the public interest. hereunder or any one or more of the purposes herein named: *Provided*, That such permits shall be allowed within or through any of said parks or any forest, military, Indian, or other reservation only upon the approval of the chief

officer of the Department under whose supervision such park or reservation falls and upon a finding by him that the same is not incompatible with the public interest: *Provided further*, That all permits given hereunder for

telegraph and telephone purposes shall be subject to the provisions of title sixty-five of the Revised Statutes of

the United States, and amendments thereto, regulating rights of way for telegraph companies over the public domain: *And provided further*, That any permission given by the Secretary of the Interior under the provisions of this act may be revoked by him or his successor in his discretion, and shall not be held to confer any right, or easement, or interest in, to, or over any public land, reservation, or park.

Licenses revocable and confer no easement.

EDISON ELECTRIC COMPANY.

ACT OF MAY 1, 1906.

Upon the conditions herein named the Edison Electric Company, a corporation existing under the laws of the State of Wyoming, and engaged in generating and distributing electric energy for use by municipalities and the public generally for lighting and power purposes, is hereby granted a permit, the duration of which shall be fixed by the Secretary of the Interior immediately after the passage of this act, revocable during the term fixed by said Secretary only in the manner and for the causes hereinafter specified, to occupy and use lands, to be designated in the manner hereinafter specified, within the San Bernardino, Sierra, and San Gabriel forest reserves, in the State of California, for canals, conduit lines, pole lines, power houses, diverting dams, necessary grounds to be submerged above the diverting dams, and necessary buildings and structures for the water-power plants hereinafter described, for the generation, transmission, and distribution of electrical power, namely:

* * * * *

Permits for the construction of each of the foregoing power plants having been heretofore granted by the Interior or Agricultural Departments.

SEC. 2. That the ground covered by the permit hereby granted shall include fifty feet on each side of the center of said canals or conduit lines and on each side of said pole lines, or so much thereof as may be actually necessary for their installation, maintenance, and use, and the ground actually occupied by and necessary for power houses, diverting dams, and necessary buildings and structures to be used in connection with the operation and maintenance of said water-power plants, together with fifty feet on each side of the marginal limits of all of such buildings and structures, or such portion of said fifty feet as may be actually necessary for the efficient operation and maintenance of said power plants,

Width of right of way.

dams, and other structures; also the right to submerge and flood at the intake of each of said power plants within said forest reserves, not to exceed thirty acres in each case, such area only as may be actually necessary to divert the water into the several canal or conduit lines for said several power plants.

SEC. 3. That within six months after the passage of this act the Edison Electric Company shall file with the register of the United States land office for the district where said power plants are located,

Maps to be filed. and with the Forester of the Department of Agriculture, a map and such copies thereof as the Secretary of the Interior may prescribe, showing separately as to each power plant the ground occupied or proposed to be occupied by such canals or conduit lines, pole lines, power houses, and other buildings and structures used in connection with said electrical power plants. These maps shall show the dimensions of each building and structure and each diverting dam, and the areas which it will be necessary to submerge at the point of intake of each power plant and, after the filing of said maps, all lands covered by this permit as shown on the maps, or to be occupied by such buildings and structures as shown, together with such portion of fifty feet on each side of the marginal limits thereof as may be actually necessary for the operation of the power plants, and such land as may be submerged by the construction and operation of said power plants shall, when disposed of by the Government, be disposed of subject to the rights hereby granted unless said rights shall have terminated or shall have been revoked as herein provided prior to such disposal.

SEC. 4. That said company shall conform to all regulations adopted or prescribed by the Secretary of Agriculture or the Secretary of the Interior governing said forest reserves, or the use or the users thereof, and shall not take, cut, or destroy any timber within the forest reserves except such as it may be actually necessary to remove to construct its power plants and the structures pertaining thereto, and it shall be required to pay to the proper officer of the Forest Service the full value of all timber and wood cut, used, or destroyed by it within the forest reserves.

SEC. 5. That the privileges herein granted shall not be construed to interfere with the control of water for irrigation and other purposes under laws of the United States or of the State of California.

Privilege not to interfere with irrigation. SEC. 6. That no private right, title, or interest owned by any person, persons, or corporation in such forest reserves shall be interfered with or abridged, except with the consent of the owner or owners, or by due process of law and just compensation to said owner or owners.

Private rights protected.

SEC. 7. That if the said permittee shall fail to consummate and put in operation the said power plant specified in subdivision (f) of section one hereof within two years from the date of the passage of this act, or the power plant specified in subdivisions (g), (h), and (i) of section one hereof within five years from the passage of this act; then as to each of said power plants not completed and put in operation within the time herein limited this permit shall be deemed to be revoked without judicial or other proceeding; and a failure during any year after completion to operate any power plant provided for in this act for a total time of ninety days in such year shall operate as a like revocation of this permit as to such plant or plants.

SEC. 8. That the enjoyment of the permit hereby granted shall be subject at all times to all laws relating to the forest reserves and to all rules and regulations authorized and established thereunder, and that for **Subject to forest reserve laws, rules, and regulations.** the owner or user of said permit shall be subject to all fines and penalties imposed thereby, and shall also be liable in a civil action for all damages that may accrue from such breach, and that for any continued infraction of such laws, rules, or regulations, or failure to pay any amount due the Forest Service from said company within sixty days of notice thereof, the Secretary of the Department of the Interior may, upon request of the Secretary of Agriculture, after due notice and hearing, revoke and vacate this permit: *Provided*, That

May be revoked. the transfer of any lands from the jurisdiction of one Department to that of another shall in no wise affect this permit, but the power hereby vested in the Secretary shall, upon such transfer, be deemed to be transferred with the land.

SEC. 9. That the said company shall pay annually in advance to the proper officer of the Forest Service, as compensation for the privileges hereby granted, such reasonable sum as the Secretary of Agriculture may fix from year to year, and shall pay for wood or timber cut, removed, or destroyed as fast as the value thereof may be ascertained and charged by the Forester: *Provided*, That the Sec-

Right of access to employees of Forest Service. retary of Agriculture, his agents and employees, and all officers of the Forest Service, shall have free and unrestricted access in, through, and across all lands and structures covered by said permit in the performance of their official duties, and the Secretary in charge of forest reserves may construct or permit to be constructed in, through, or across any land covered by said permit roads or trails, public or otherwise, or other means of transportation, not inconsistent with the enjoyment of the permit hereby granted: *Provided further*, That the Edison Electric Company

shall, under penalty of immediate forfeiture of the permit hereby granted, when requested to do so, assist the forest officers in fighting fire, and shall furnish any men under its employ necessary for that purpose, and shall otherwise assist to the extent of its power in protecting the forest reserves and maintaining good order upon them.

Company to assist in fighting fire. SEC. 10. That Congress shall have power at any time to amend, modify, or repeal this act.

HOMESTEADS IN YELLOWSTONE FOREST RESERVE.

ACT OF MARCH 15, 1906.

The general provisions of the homestead laws of the United States Homestead laws extended to six townships in Yellowstone Forest Reserve. be, and the same are hereby, extended to and over the surveyed lands in townships forty-eight, forty-nine, and fifty, and ranges one hundred and five and one hundred and six, within the Yellowstone Forest Reserve, and the said lands shall be subject to entry ninety days after the passage of this act, within which ninety-day period the Secretary of Agriculture may set aside such portions of said lands as were not occupied by a bona fide settler January first, nineteen hundred and six, not to exceed in the aggregate one hundred and sixty acres, as may be necessary for forest-reserve administrative purposes, which lands so set aside shall not be subject to settlement entry or location during the life of the forest reserve: *Provided*, That the commutation clause of the homestead laws shall not apply to the said lands, and any bona fide settler who made settlement on said lands prior to January first, nineteen hundred and six, and who had prior to that time lost or exercised his homestead right, may enter and perfect title to the lands settled upon by him as though his homestead right had not been lost or exercised, upon the payment of the sum of one dollar and twenty-five cents per acre for the land included in his entry at the time of making final proof.

AGRICULTURAL SETTLEMENT.

ACT OF JUNE 11, 1906.

The Secretary of Agriculture may, in his discretion, and he is hereby authorized, upon application or otherwise, to examine and ascertain as to the location and extent of lands within permanent or temporary forest reserves, except the following counties in the State of California: Inyo, Tulare, Kern, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, Orange, Riverside, and San Diego; which are chiefly valuable for agriculture, and which, in his opin-

Secretary of Agriculture may list agricultural land for settlement.

ion, may be occupied for agricultural purposes without injury to the forest reserves, and which are not needed for public purposes,

and may list and describe the same by metes

Metes and bounds. and bounds, or otherwise, and file the lists and descriptions with the Secretary of the Interior,

with the request that the said lands be opened to entry in accordance with the provisions of the homestead laws and this act.

Upon the filing of any such list or description the Secretary of the Interior shall declare the said lands open

Secretary of the Interior shall open such lands to settlement. to homestead settlement and entry in tracts not exceeding one hundred and sixty acres in area

and not exceeding one mile in length at the

expiration of sixty days from the filing of the list in the land office of the district within which the lands are located, during which

period the said list or description shall be prominently posted in the land office and advertised

Advertisement. for a period of not less than four weeks in one newspaper of general circulation published in the county in which

Preference rights of settlement and entry. the lands are situated: *Provided*, That any settler actually occupying and in good faith claiming such lands for agricultural purposes prior

to January first, nineteen hundred and six, and who shall not have abandoned the same, and the person, if qualified to make a homestead entry, upon whose application the land proposed to be entered was examined and listed, shall, each in the order named, have a preference right of settlement and entry: *Provided further*, That any entryman desiring to obtain patent

Surveys by metes and bounds. to any lands described by metes and bounds entered by him under the provisions of this

act shall, within five years of the date of making settlement, file, with the required proof of residence and cultivation, a plat and field notes of the lands entered, made by or under the direction of the United States surveyor-general, showing accurately the boundaries of such lands, which shall be distinctly

marked by monuments on the ground, and by

Posting notices. posting a copy of such plat, together with a notice of the time and place of offering proof, in a conspicuous place on the land embraced in such plat during the period prescribed by law for the publication of his notice of intention to offer proof, and that a copy of such plat and field notes shall also be kept posted in the office of the register of the land office for the land district in which such lands are situated for a like period; and further, that any agricultural lands within

Secretary may survey by metes and bounds. forest reserves may, at the discretion of the Secretary, be surveyed by metes and bounds, and that no lands entered under the provisions of this act shall be patented under the commutation provisions of the homestead laws, but settlers, upon final proof, shall have credit

Entries may not be commuted.

for the period of their actual residence upon the lands covered by their entries.

SEC. 2. That settlers upon lands chiefly valuable for agriculture

Additional homestead right given to actual settlers prior to January 1, 1906. within forest reserves on January first, nineteen hundred and six, who have already exercised or lost their homestead privilege, but are otherwise competent to enter lands under the homestead laws, are hereby granted an additional

homestead right of entry for the purposes of this act only, and such settlers must otherwise comply with the provisions of the homestead law, and in addition thereto must pay two dollars and fifty cents per acre for lands entered under the provisions of this section, such payment to be made at the time of making final proof on such lands.

SEC. 3. That all entries under this act in the Black Hills Forest

Quartz and lode mining laws. Reserve shall be subject to the quartz or lode mining laws of the United States, and the laws and regulations permitting the location, appropriation, and use of the waters within the said forest reserves for mining, irrigation, and other purposes; and no titles acquired to agricultural lands in said Black Hills Forest Reserve under this act shall vest in the patentee any riparian rights to any stream or streams of flowing water within said reserve; and that such limitation of title

Restriction on water rights. shall be expressed in the patents for the lands covered by such entries.

SEC. 4. That no homestead settlements or entries shall be allowed

Lawrence and Pennington counties excepted. in that portion of the Black Hills Forest Reserve in Lawrence and Pennington counties, in South Dakota, except to persons occupying lands therein prior to January first, nineteen hundred and six, and the provisions of this act shall apply to the said counties in said reserve only so far as is necessary to give and

perfect title of such settlers or occupants to lands chiefly valuable for agriculture therein occupied or claimed by them prior to the said date, and all homestead entries under this act in said counties in said reserve shall be described by metes and bounds survey.

SEC. 5. That nothing herein contained shall be held to author-

Settlement before opening is trespass. ize any future settlement on any lands within forest reserves until such lands have been opened to settlement as provided in this act, or to in any way impair the legal rights of any bona fide homestead settler who has or shall establish residence upon public lands prior to their inclusion within a forest reserve.

HISTORIC AND SCIENTIFIC MONUMENTS.

ACT OF JUNE 8, 1906.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Historic and prehistoric monuments protected. That any person who shall appropriate, excavate, injure, or destroy any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the Government of the United States, without the permission of the Secretary of the Department of the Government having jurisdiction over the lands on which said antiquities are situated, shall, upon conviction, be fined in a sum of not more than five hundred dollars or be imprisoned for a period of not more than ninety days, or shall suffer both fine and imprisonment, in the discretion of the court.

SEC. 2. That the President of the United States is hereby authorized, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part thereof parcels of land the limits of which in all cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected: *Provided*, That when such objects are situated upon a tract covered by a bona fide unperfected claim or held in private ownership, the tract, or so much thereof as may be necessary for the proper care and management of the object, may be relinquished to the Government, and the Secretary of the Interior is hereby authorized to accept the relinquishment of such tracts in behalf of the Government of the United States.

Objects of historic and scientific interest may be reserved as national monuments.

SEC. 3. That permits for the examination of ruins, the excavation of archaeological sites, and the gathering of objects of antiquity upon the lands under their respective jurisdictions may be granted by the Secretaries of the Interior, Agriculture,

Permits for examination, excavation, and collection. and War to institutions which they may deem properly qualified to conduct such examination, excavation, or gathering, subject to such rules and regulations as they may prescribe: *Provided*, That the examinations, excavations, and gatherings are undertaken for the benefit of reputable museums, universities, colleges, or other recognized scientific or educational institutions, with a view to increasing the knowledge of such objects, and that the gatherings shall be made for permanent preservation in public museums.

SEC. 4. That the Secretaries of the Departments aforesaid shall make and publish from time to time uniform rules and regulations for the purpose of carrying out the provisions of this act.

Uniform rules and regulations.

Trespass and Fire Laws.

TIMBER ON PUBLIC LANDS.

REVISED STATUTES, SEC. 2461.

If any person shall cut, or cause or procure to be cut, or aid, assist, or be employed in cutting, or shall wantonly destroy, or cause or procure to be wantonly destroyed, or aid, assist, or be employed in wantonly destroying any live-oak or red-cedar trees, or other timber standing, growing, or being on any lands of the United States which, in pursuance of any law passed or hereafter to be passed, have been reserved or purchased for the use of the United States, for supplying or furnishing therefrom timber for the Navy of the United States; or if any person shall remove, or cause or procure to be removed, or aid, or assist, or be employed in removing from any such lands which have been reserved or purchased any live-oak or red-cedar trees, or other timber, unless duly authorized so to do, by order, in writing, of a competent officer, and for the use of the Navy of the United States; or if any person shall cut, or cause or procure to be cut, or aid, or assist, or be employed in cutting any live-oak or red-cedar trees, or other timber on, or shall remove, or cause or procure to be removed, or aid, or assist, or be employed in removing any live-oak or red-cedar trees or other timber, from any other lands of the United States acquired, or hereafter to be acquired, with intent to export, dispose of, use, or employ the same in any manner whatsoever, other than for the use of the Navy of

Penalty. the United States, every such person shall pay a fine not less than triple the value of the trees or timber so cut, destroyed, or removed, and shall be imprisoned not exceeding twelve months.

NOTE.—The penalty here imposed applies to all timber on public lands.

Rulings with regard to timber trespass on public land. *U. S. v. Briggs*, 9 How., 351. Homestead settlers may sell timber cut for cultivation purposes, but not otherwise.

Shiver v. U. S., 159 U. S., 491.

Stone v. U. S., 167 U. S., 178.

Ignorance of the law is no defense.

U. S. v. Murphy, 32 Fed. Rep., 376.

It is error for the court to instruct the jury that the Government has always tacitly permitted the pioneer settlers to cut timber from the public domain.

U. S. v. Mock, 149, U. S., 273.

Persons may not carry off timber or other property from public lands and sell it for profit.

U. S. v. Mock, 149, U. S., 273.

TIMBER ON MINERAL LANDS.

ACT OF JUNE 3, 1878 (20 STAT., 88).

SEC. 1. All citizens of the United States and other persons, bona fide residents of the State of Colorado, or Nevada, or either of the Territories of New Mexico, Arizona, Utah, Wyoming, Dakota, Idaho, or Montana, and all other mineral districts of the United States, shall be, and are hereby, authorized and permitted to fell and remove, for building, agricultural, mining, or other domestic purposes, any timber or other trees growing or being on the public lands, said lands being mineral, and not subject to entry under existing laws of the United States, except for mineral entry, in either of said States, Territories, or districts of which such citizens or persons may be at the time bona fide residents, subject to such rules and regulations as the Secretary of the Interior may

Secretary of the Interior to regulate. prescribe for the protection of the timber and of the undergrowth growing upon such lands, and for other purposes: *Provided*, The provisions of this act shall not extend to railroad corporations.

Not to extend to railroads. SEC. 2. It shall be the duty of the register and the receiver of any local land office in whose district any mineral land may be situated to ascertain from time to time whether

Duty of land officers. any timber is being cut or used upon any such lands, except for the purposes authorized by this act, within their respective land districts; and, if so, they shall immediately notify the Commissioner of the General Land Office of that fact; and all necessary expenses incurred

Trespass. in making such proper examinations shall be paid and allowed such register and receiver in making up their next quarterly accounts.

SEC. 3. Any person or persons who shall violate the provisions of this act, or any rules and regulations in pursuance thereof made by the Secretary of the Interior, shall be

Penalty. deemed guilty of a misdemeanor, and, upon conviction, shall be fined in any sum not exceeding five hundred dollars, and to which may be added imprisonment for any term not exceeding six months.

TRESPASS UNDER TIMBER AND STONE ACT.

ACT OF JUNE 3, 1878 (20 STAT., 90).

* * * *

SEC. 4. After the passage of this act it shall be unlawful to cut, or cause or procure to be cut, or wantonly destroy, any timber growing on any lands of the United States [in any public-land States], or remove, or cause to be removed, any timber from said public lands with intent to export or dispose of the

Criminal trespass on public timber.
June 3, 1878, c. 151,
s. 4, v. 20, p. 90.

same; and no owner, master, or consignee of any vessel, or

Amendment, Aug. 4, 1892, c. 375, s. 2, v. 27, p. 348. owner, director, or agent of any railroad, shall knowingly transport the same, or any lumber manufactured therefrom; and any person violating the provisions of this section shall be guilty of a misdemeanor, and, on conviction

Vessels and railroads not to transport such timber.

Penalty.

not less than one

Farmers, miners, and officers of the U. S. allowed proper timber use.

support his improvements, or the taking of timber for the use of the United States; and the penalties herein provided shall not take effect until ninety days after the passage of this act.

SEC. 5. Any person prosecuted in * * * [any public land States] for violating section 2461 of the Revised Statutes of the United States who is not prosecuted for cutting timber for export from the United States, may be relieved from further prosecution and liability therefor upon pay-

ment, into the court wherein said action is pending, of the sum of two dollars and fifty cents per acre for all lands on which he shall have cut or caused to be cut timber, or removed or caused to be removed the same: *Provided*, That nothing contained in this section shall be construed as

No title granted to party relieved.

Fines to be covered into U. S. Treasury. R. S., see. 4751, repealed for public-land States.

Amendment, Aug. 4, 1892, c. 375, s. 2, v. 27, p. 348.

States. And section 4751 of the Revised Statutes is hereby repealed, so far as it relates to [* * * the public-land States].

NOTE 1.—The words in brackets in above section are inserted in place of the words "in said States and Territory," as ordered by amending act of Aug. 4, 1892.

NOTE 2.—This section relieves the trespasser from criminal but not from civil liability at common law.

U. S. v. Scott, 39 Fed. Rep., 900.

NOTE 3.—Act of Feb. 24, 1897 (29 Stat., 594), is amended by the above section by omitting, where indicated by stars, the words "camp fire or other" and "breaking camp or," respectively.

NOTE 4.—The other sections of this act, which is known as the "Timber and stone act," provide for purchase of public timber land.

TIMBER ON RESERVED LANDS.

ACT OF JUNE 4, 1888 (25 STAT., 166).

Section fifty-three hundred and eighty-eight of the Revised Statutes of the United States be amended so as **Penalty for trespass.** to read as follows: "Every person who unlawfully cuts, or aids or is employed in unlawfully cutting, or wantonly destroys or procures to be wantonly destroyed, any timber standing upon the land of the United States which, in pursuance of law, may be reserved or purchased for military or other purposes, or upon any Indian reservation, or lands belonging to or occupied by any tribe of Indians under authority of the United States, shall pay a fine of not more than five hundred dollars or be imprisoned not more than twelve months, or both, in the discretion of the court."

CUTTING FOR TURPENTINE.

ACT OF JUNE 4, 1906.

Every person who shall cut, chip, chop, or box **Cutting or boxing trees on public or entered land a misde-meanor.** any tree on any lands belonging to the United States or on any lands covered by or embraced in any unperfected settlement, application, filing, entry, selection, or location, made under any law of the United States, for the purpose of obtaining from such tree any pitch, turpentine, or other substance; and every person who shall knowingly encourage, cause, procure, or aid any such tree to be so cut, or who shall buy, trade for, or in any manner acquire any pitch, turpentine, or other substance, or any article or commodity made from any pitch, turpentine, or other substance, when he has knowledge that the same has been so unlawfully obtained from such trees, shall be guilty of a misdemeanor, and upon conviction thereof be punished by a fine of not more than five hundred dollars or by imprisonment not exceeding twelve months, or by both such fine and imprisonment.

DEFACING SURVEY MARKS.

ACT OF JUNE 10, 1896 (29 STAT., 343).

Hereafter it shall be unlawful for any person to destroy, deface, change, or remove to another place any section corner, quarter-section corner, or meander post on any Government line of survey, or to cut down any witness tree or any tree blazed to mark the line of a Government survey, or to deface, change, or remove any monument or bench mark of any Government survey. That any person who shall offend against any of the provisions of **Defacing survey marks a misde-meanor.**

this paragraph shall be deemed guilty of a misdemeanor, and upon conviction thereof in any court shall be fined not exceeding two hundred and fifty dollars, or be imprisoned not more than one hundred days. All the fines accruing under this paragraph shall be paid into the Treasury, and the informer, in each case of conviction, shall be paid the sum of twenty-five dollars.

FIRE LAW.

ACT OF MAY 5, 1900 (31 STAT., 169).

SEC. 1. Any person who shall willfully or maliciously set on fire,

Setting fires to timber on the public domain. Feb. 24, 1897, c. 313, v. 29, p. 594, amended by May 5, 1900, c. 349, v. 31, p. 169.

or cause to be set on fire, any timber, under-brush, or grass upon the public domain, or shall * * * leave or suffer fire to burn unattended near any timber or other inflammable material, shall be deemed guilty of a misdemeanor, and upon conviction thereof in any district court of the United States having jurisdiction of the same, shall be fined in a sum not more than five thousand dollars or

Penalty. be imprisoned for a term of not more than two years, or both.

NOTE.—Act of Feb. 24, 1897 (29 Stat., 594), is amended by the above section by omitting, where indicated by stars, the words "carelessly or negligently."

SEC. 2. Any person who shall build a * * * fire in or near

Leaving fire unextinguished on the public domain. any forest, timber, or other inflammable material upon the public domain shall, before * * * leaving said fire, totally extinguish the same. Any person failing to do so shall be deemed guilty of a misdemeanor, and upon conviction thereof in any district court of the United States having jurisdiction of

Penalty. the same, shall be fined in a sum not more than one thousand dollars, or be imprisoned for a term of not more than one year, or both.

SEC. 3. That in all cases arising under this act the fines collected shall be paid into the public school fund of the county in which the lands where the offense was committed are situated.

NOTE.—By virtue of power granted to the Secretary of the Interior under act of June 3, 1878 (20 Stat.,

Disposal of tops, brush, and other refuse. 88), said Secretary provides, in his "rules and regulations governing the use of timber on the public mineral lands" (29

L. D., 571): "SEC. 9. Persons felling or removing timber under the provisions of this act must utilize all of each tree cut that can be profitably used, and must dispose of the tops, brush, and other refuse in such manner as to prevent the spread of forest fires."

WICHITA GAME REFUGE.

ACT OF JANUARY 24, 1905 (33 STAT., 614).

The President of the United States is hereby authorized to designate such areas in the Wichita Forest Reserve Game refuge. as should, in his opinion, be set aside for the protection of game animals and birds and be recognized as a breeding place therefor.

SEC. 2. That when such areas have been designated as provided for in section one of this act, hunting, trapping, Hunting, etc., regulated. killing, or capturing of game animals and birds upon the lands of the United States within the limits of said areas shall be unlawful, except under such regulations as may be prescribed from time to time by the Secretary of Agriculture; and any person violating such regulations or the provisions of this act shall be deemed guilty of a Penalty. misdemeanor, and shall, upon conviction in any United States court of competent jurisdiction, be fined in a sum not exceeding one thousand dollars, or be imprisoned for a period not exceeding one year, or shall suffer both fine and imprisonment, in the discretion of the court.

SEC. 3. That it is the purpose of this act to protect from trespass Local game laws not interfered with. the public lands of the United States and the game animals and birds which may be thereon, and not to interfere with the operation of the local game laws as affecting private, State, or Territorial lands.

ARRESTS.

ACT OF FEBRUARY 6, 1905 (33 STAT., 700).

All persons employed in the forest reserve and national park service of the United States shall have authority Forest officers empowered to arrest. to make arrests for the violation of the laws and regulations relating to the forest reserves and national parks, and any person so arrested shall be taken before the nearest United States commissioner, within whose jurisdiction the reservation or national park is located, for trial; and upon sworn information by any competent person any United States commissioner in the proper jurisdiction shall issue process for the arrest of any person charged with the violation of said laws.

GENERAL DECISIONS.

RESTRAINT OF UNAUTHORIZED GRAZING IN FOREST RESERVES.

UNITED STATES *v.* DASTERVIGNES ET AL.

(Circuit court, N. D. California. August 18, 1902. 118 Fed. Rep., 199.)

1. FORESTS—REGULATION—RULES—DELEGATION OF LEGISLATIVE AUTHORITY.

The act of Congress approved June 4, 1897 (30 Stat., 35), authorized the Secretary of the Interior, in his superintendence of all forest reservations, to "make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction." *Held*, that the authority given the Secretary is not unconstitutional as a delegation of legislative authority.

2. SAME—USE OF PUBLIC LANDS.

The pasturing of sheep on the Stanislaus Forest Reservation having been forbidden by rule of the Secretary of the Interior under authority of act of June 4, 1897 (30 Stat., 35), user can not give a right of pasturage there.

3. SAME—USER.

Inasmuch as laches can not be invoked against the Government, user of Government lands for pasturage gives no right so to do.

4. SAME—RESTRANING USE—BILL—ALLEGATIONS.

A bill seeking to restrain defendants from pasturing sheep on a certain forest reservation alleged that defendants drove several bands of sheep upon the reservation. *Held*, that a demurrer on the ground that there was a misjoinder of defendants was of no merit, since, while it did not appear that the defendants committed several acts of trespass, it appeared there was a joint offense, and, even if the acts were several, they might all be included in one equitable action, the law and testimony applicable to each defendant being the same.

5. SAME—ALLEGATIONS—DAMAGES.

Where a bill to restrain the pasturage of sheep on a certain forest reservation alleged that the grasses, herbage, and undergrowth were injured by the tramping, traveling, and driving of the sheep, the allegations as to damage were sufficient to warrant continuance of a restraining order pendente lite.

DASTERVIGNES ET AL. v. UNITED STATES.

(Circuit court of appeals, ninth circuit. March 2, 1903. 122 Fed. Rep., 30.)

1. CONSTITUTIONAL LAW—DELEGATION OF LEGISLATIVE POWER—ACT AUTHORIZING REGULATIONS FOR FOREST RESERVATIONS.

The provisions of the sundry civil appropriation act of June 4, 1897, relating to forest reservations (30 Stat., 35 [U. S. Comp. St., 1901, p. 1540]), which authorizes the Secretary of the Interior to "make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction," and which itself prescribes the penalty for violation of such regulations, is not unconstitutional as delegating legislative power to an administrative officer, but is a valid delegation of power to make administrative regulations in relation to details necessary to carry out the purpose of the act.

2. FOREST RESERVATIONS—VALIDITY OF REGULATIONS—EXCLUSION OF SHEEP.

Rule 13, made and promulgated by the Secretary pursuant to such authority, which prohibits the pasturing of sheep and goats on public lands in the forest reservation, except in cases where permits for their limited grazing may be granted by the land department with the approval of the Secretary, is a proper and legitimate exercise of the authority conferred, which gives the Secretary the right to exclude from the reservations any class of live stock found to be destructive of the purpose for which they were created; and such rule can not be said to create an unjust or illegal discrimination against the owners of the sheep, which constitute a class of live stock differing from any other in respect to pasturage, and which has uniformly been recognized as a proper subject for special legislation and regulation.

3. SAME—INJUNCTION AGAINST PASTURAGE OF SHEEP—GROUNDS.

A bill filed by the United States to enjoin the pasturage of sheep in a forest reservation, in violation of the regulations prescribed by the Secretary of the Interior, alleged that the sheep pastured within the reservation were committing great and irreparable injury to the public lands therein, and to the undergrowth, timber, and water supply. Affidavits filed in support of such allegations recited that the sheep of defendants destroyed undergrowth, young and growing trees and seedlings, and ate and de-

stroyed the roots of the vegetation and grasses, leaving the ground bare and subject to disastrous washings by the rains, to the irreparable injury of the reservation. Held, that such allegation and showing constituted a sufficient ground for the granting of a preliminary injunction.

4. EQUITY—SUFFICIENCY OF BILL—MULTIFARIOUSNESS.

A bill by the United States against a number of defendants, to enjoin them from pasturing sheep in a forest reservation, is not subject to the objection of misjoinder and multifariousness where it alleges that defendants are pasturing two bands of sheep in the reservation, and contains no averments which show or indicate any separate or distinct rights or different interests as between the several defendants.

(See also *United States v. Tygh Valley Land and Live Stock Co.*; 76 Fed. Rep., 693.)

JOSEPH DENT *v.* THE UNITED STATES.

(Supreme court of Arizona. 76 Pac. Rep., 455.)

Appeal from the district court for the fourth judicial district, before Justice R. E. Sloan.

On rehearing.

The appellant was convicted of the crime of pasturing sheep upon the public lands in a forest reservation, in violation of the rules of the Secretary of the Interior promulgated under authority of the act of Congress of June 4, 1897 (30 Stat., 35), which act provides that any violation of such rules shall be punished by fine or imprisonment. The former opinion of the court will be found in 71 Pac., 920.

Opinion by Kent, C. J.

A rehearing having been granted at this term of court, this case has been again argued by counsel. Since we rendered our decision at a former term, the case of the *United States v. Dastervignes* (122 Fed., 30) has been reported. In that case the circuit court of appeals for the ninth circuit has held that the act in question did not delegate legislative power to the Secretary and was not unconstitutional. Inasmuch as under the act creating the circuit courts of appeal such court exercises appellate jurisdiction over this court in criminal cases, such as the one at bar, we feel that a decision of that court, although made in a civil and not a criminal case, expressly holding that the act in question is constitutional and a valid delegation of power, is binding upon us in this case;

and if it be true that inasmuch as the sole question involved in this case is the constitutionality of the act, an appeal will not lie in this case from our decision to the circuit court of appeals—a question which it is not proper for us to determine—we still feel that the determination of the circuit court of appeals is binding upon us. An appeal does not lie from our decision in this case to the Supreme Court of the United States, and yet if such court had determined the question of the constitutionality of the act such determination would be binding upon us.

Inasmuch as the circuit court of appeals is a court exercising appellate jurisdiction over us in criminal cases of this character, we are in like manner bound by its determination upon this question, although the record may prevent an appeal being taken to such court in the particular case before us. Indeed, if it be true that no appeal lies to any court from our decision in capital cases or in criminal cases where the constitutionality of a Federal statute is the sole question involved, but the right of review of our decisions in criminal cases is confined to the appellate jurisdiction of the circuit court of appeals in minor criminal cases, and when less important questions are involved, this somewhat anomalous condition of the law should not prevent our recognizing the binding force of a determination of such circuit court of appeals upon such constitutional question, since if the record in this case presented other questions for review, thereby giving it jurisdiction, such court undoubtedly would have the right to, and would review in connection therewith our determination upon the constitutional question involved. Therefore, if it be that the correctness of our determination upon the constitutional question can not be passed upon by such court in this particular case, it is perhaps for that reason all the more incumbent upon us to follow in the path marked out for us by that court.

Farnsworth *v.* Montana, 129 U. S., 104;
Cross *v.* United States, 145 U. S., 571;
Chapman *v.* United States, 164 U. S., 436;
In re Heath, 144 U. S., 92;
Carter *v.* Roberts, 177 U. S., 496;
Holt *v.* Indiana Co., 80 Fed., 1;
Texas & P. R. Co. *v.* Blook, 60 Fed., 979;
Hubinger Co. *v.* Ry. Co., 98 Fed. 897;
Davis *v.* Burke, 97 Fed., 501.

As we feel that we are in any event controlled by the decision on the Dastervignes case, we do not think it necessary to state to what extent we have changed our views from our original holding in the light of a further examination of the question and the fuller discussion afforded us upon the reargument.

Judgment will be entered affirming the judgment entered in the lower court in favor of the United States.

DEPARTMENT OF JUSTICE,
Washington, D. C., November 17, 1898.

The SECRETARY OF THE INTERIOR.

SIR: Section 5388 of the Revised Statutes, as amended by the act of June 4, 1888 (25 Stat., 166), provides as follows:

Every person who unlawfully cuts, or aids or is employed in unlawfully cutting, or wantonly destroys or procures to be wantonly destroyed, any timber standing upon the land of the United States which, in pursuance of law, may be reserved or purchased for military or other purposes, or upon any Indian reservation, or lands belonging to or occupied by any tribe of Indians under authority of the United States, shall pay a fine of not more than five hundred dollars or be imprisoned not more than twelve months, or both, in the discretion of the court.

The act of June 4, 1897, entitled, "An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1898, and for other purposes," provides (28 Stat., 35):

The Secretary of the Interior shall make provisions for the protection against destruction by fire and depredations upon the public forests and forest reservations which may have been set aside or which may be hereafter set aside under the said act of March 3, 1891, and which may be continued; and he may make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction; and any violations of the provisions of this act or such rules and regulations shall be punished as is provided for in the act of June 4, 1888, amending section 5388 of the Revised Statutes of the United States.

Under the authority thus conferred, the Secretary of the Interior, on June 30, 1897, promulgated certain rules and regulations for the purpose of regulating the occupancy and use of the forest reservations and to preserve the forests thereon from destruction, among which was the following:

13. The pasturing of live stock on the public lands in forest reservations will not be interfered with so long as it appears that injury is not being done to the forest growth and the rights of others are not thereby jeopardized. The pasturing of sheep is, however, prohibited in all forest reservations, except those in the States of Oregon and Washington, for the reason that sheep grazing has been found injurious to the forest cover, and therefore of serious consequence in regions where the rainfall is limited. The exception in favor of the

States of Oregon and Washington is made because the continuous moisture and abundant rainfall of the Cascade and Pacific coast ranges make rapid renewal of herbage and under-growth, possible, etc.

In view of the foregoing, you request my opinion whether a criminal prosecution will lie to punish a person who grazes sheep in a forest reservation in violation of the regulation quoted.

I recognize the existence of the salutary rule that Congress can not delegate its legislative power so as to authorize an administrative officer, by the adoption of regulations, to create an offense and prescribe its punishment. But here the statute proclaims the punishment for an offense which in general terms is defined by law, the regulation dealing only with a matter of detail and administration necessary to carry into effect the object of the law. The protection of the public forest is entrusted to the Secretary of the Interior. Section 5388 makes it an offense, punishable by fine and imprisonment, for any person wantonly to destroy any timber on a public reservation. In furtherance of this policy the act of June 4, 1897, directs the Secretary to make provision for the protection of the forests and authorizes him to regulate the use and occupancy of the forest reservations and to preserve the forests thereon from destruction, making for such purpose proper rules and regulations. Any violation of such rules and regulations is, by the statute, made an offense, punishable as provided in section 5388.

By this law the control of the occupancy and use of these reservations is handed over to the Secretary for the purpose of preserving the forests thereon, and any occupancy or use in violation of the rules and regulations adopted by him is made punishable criminally. It seems to me Congress has a right to do this. Suppose Congress had provided that the occupation or use of a forest reservation by any person, without permission of the Secretary, should be a misdemeanor. Would not this be a valid exercise of legislative power? The present statute does no more. The regulation is reasonable and necessary. It restrains no one in the enjoyment of any natural or legal right. To use the language of Mr. Chief Justice Fuller in *In re Kollock* (165 U. S., 526, 533):

The regulation was in execution of, or supplementary to, but not in conflict with, the law itself, and was specifically authorized thereby in effectuation of the legislation which created the offence.

Your question, therefore, is answered in the affirmative.

Very respectfully,

JOHN K. RICHARDS.

Solititor-General.

Approved:

JOHN W. GRIGGS,
Attorney-General.

SCHOOL LANDS IN FOREST RESERVES.

Where a forest reservation includes within its limits a school section surveyed prior to the establishment of the reservation, the State, under the authority of the first proviso to section 2275, Revised Statutes, as amended by the act of February 28, 1891, may be allowed to waive its right to such section and select other land in lieu thereof.

The decision herein of December 27, 1894, 19 L. D., 585, recalled and vacated.

Instructions of December 19, 1893, 17 L. D., 576, modified. (State of California, 28 L. D., 57.)

By the act of June 21, 1898, a grant, *in presenti*, of school lands is made to the Territory of New Mexico; and under the provisions of section 2275, Revised Statutes, as amended by the act of February 28, 1891, said Territory may relinquish its claim to such school sections as it may be entitled that are included within the limits of a forest reserve, and select other lands in lieu thereof. (Territory of New Mexico, 29 L. D., 365.)

Section 11 of the act of February 22, 1889 (25 Stat., 676-680 affecting North Dakota, South Dakota, Montana, and Washington only), withheld sections 16 and 36 from entry under the land laws, whether surveyed or unsurveyed, in consequence of which provision they ceased to be "public lands" in the sense used in section 24 of the act of March 3, 1891 (26 Stat., 1095), authorizing the establishment of forest reserves. (South Dakota *v.* Hiram H. Ruby. Unpublished decision of Secretary of the Interior, dated May 21, 1904.)

Unsurveyed sections 16 and 36, embraced in land withdrawn for a forest reserve by proclamation dated September 28, 1893, plat of survey of which was approved January 13, 1894, and filed in local land office October, 1894, do not become property of State upon survey, but are a part of the forest reserve, and should be administered free from the claim of transferees of the State of Oregon. (Curtis Lumber Co. *ex parte*. Decision "R" of Commissioner of the General Land Office, unpublished, dated February 28, 1906.)

TIMBER CUTTING ON MINING CLAIMS.

An occupant of a mineral claim, who has applied for a patent, has no right, before the purchase price is paid and he receives a certificate, to cut the timber on such claim with intent to export or remove the same, and a license from him to so cut the timber is no protection to the licensee as against the Government.

The exclusive right to occupy and work a mineral claim, given to the locator by the mining laws during his occupancy, does not segregate such claim from the public domain so as to exclude such land from the operation of Rev. Stat., 2461, 20 Stat., 89, and 27 Stat., 348, making it a misdemeanor for any person to cut timber on the public lands. (*Teller v. United States*, 113 Fed. Rep., p. 273. Syllabus.)

MINERAL LANDS WITHIN FOREST RESERVES.

COAL LANDS.

The words "the existing mining laws of the United States" are to be construed, in legislative enactments, as embracing sections 2347 to 2352, inclusive, of the Revised Statutes, commonly known as the "coal-land law," unless an intention to the contrary is expressed. (T. P. Crowder, 30 L. D., 92.)

Coal lands are mineral lands within the meaning of the act of June 4, 1897, and as such are subject to entry, when found in forest reservations, the same as other mineral lands within such reservations. (T. P. Crowder, 30 L. D., 92.)

While the statute does not prescribe what is necessary to constitute a discovery under the mining laws of the United States, it is essential that it gives reasonable evidence of the fact either that there is a vein or lode carrying precious minerals, or if it be claimed as placer ground that it is valuable for such mining; and where there is not enough in what a locator claims to have seen to justify a prudent person in the expenditure of money and labor in exploitation, this court will not overthrow a finding of the lower court that there was no discovery. (*Chrisman v. Miller*, 197 U. S., p. 313. Syllabus.)

Should the question of the character of the land be properly presented at any time before patent, it would manifestly be the duty of the [Interior] Department to ascertain whether or not the land contain "valuable deposits," in an *ex parte* case or a contest. The fact that a claim is contested would not change the character of the land to be taken under this law. In any event it must contain "valuable deposits."

The supreme court has not determined what amount of gold will constitute "valuable deposits," and yet it has indicated in *U. S. v. Iron Silver Mining Company* (128 U. S., 673) that the deposit must be of substantial value.

The court says:

"It is the policy of the Government to favor the development of mines of gold and silver and other metals, and every facility is afforded for that purpose; but it exacts a faithful compliance with the conditions required. There must be a discovery of mineral and a sufficient exploration of the ground

to show this fact beyond question. * * * If the land contains gold or other valuable deposits in loose earth, sand, or gravel, which can be *secured with profit*, that fact will satisfy the demand of the Government as to the character of the land as placer ground." (Royal K. Placer, 13 L. D., p. 89.)

An actual discovery of mineral is a prerequisite to the location of a mining claim.

A certificate of the location of a mining claim can not be accepted as establishing the mineral character of a tract in the absence of other evidence showing an actual discovery of mineral.

The existence of gold in nonpaying quantities will not preclude agricultural entry of the land. (Etling et al. v. Potter, 17 L. D., p. 424. Syllabus.)

Some few pieces of asphaltum were found, but the principal result of what little prospecting and developing have been done is the finding of "indications" of mineral, and it can not be said that the indications found on these lands in section 21 of oil and asphaltum demonstrate that there is a permanent deposit of these minerals which will pay to work. (Tulare Oil & Mining Co. v. Southern Pacific R. R. Co., 29 L. D., p. 272.)

Where mineral is found, and it appears that a person of ordinary prudence would be justified in further expenditures with a reasonable prospect of success in developing a mine, the land may be properly regarded as mineral in character. (Walker v. Southern Pacific R. R. Co., 24 L. D., p. 172. Syllabus.)

Land must be held nonmineral where no discoveries of appreciable value have been made, and it does not appear that a further expenditure would develop the presence of minerals in paying quantities. (Reed et al. v. Lavallee et al., 26 L. D., 100. Syllabus.)

A single discovery is sufficient to authorize the location of a placer claim, and may in the absence of any claim or evidence to the contrary be accepted as establishing the mineral character of the entire claim sufficiently to justify the patenting thereof, but such single discovery does not conclusively establish the mineral character of all the land included in the claim, so as to preclude further inquiry in respect thereto.

The entire area that may be taken as a placer claim can not be acquired as appurtenant to placer deposits which are shown to exist only in a portion thereof.

Where a part of the area embraced within a placer entry, in this instance twenty acres, is shown to contain no valuable mineral deposit subject to placer location, such part of the claim will be excluded from the entry. (Ferrell et al. v. Hoge et al., 29 L. D., p. 12. Syllabus.)

Deposits of fine clay or kaolin, being nonmetalliferous in character, are properly subject to entry as placers and not as lode claims. (The Dobbs' Placer Mine, 1 L. D., p. 565. Syllabus.)

Whatever is recognized as a mineral by the standard authorities, whether of metallic or other substances, when found in the public lands in quantity and quality sufficient to render the land more valuable on account thereof than for agricultural purposes, must be treated as coming within the purview of the mining laws.

Lands valuable only on account of the marble deposit contained therein are subject to placer entry under the mining laws.

Lands containing valuable mineral deposits, whether of the metaliferous or fossiliferous class, of such quantity and quality as to render them subject to entry under the mining laws, are "mineral lands" within the meaning of that term as used in the exception from the grant to the Northern Pacific Company for railroad purposes and to the State for school purposes. (*Pacific Coast Marble Co. v. Northern Pacific R. R. Co. et al*, 25 L. D., p. 233. Syllabus.)

A deposit of "brick clay" will not warrant the classification of land as mineral, or entry thereof as a placer claim. (*Dunluce Placer Mine*, 6 L. D., p. 761. Syllabus.)

The mineral character of the land is established when it is shown to have upon or within it such a substance as (a) is recognized as mineral, according to its chemical composition by the standard authorities on the subject, or (b) is classified as a mineral product in trade or commerce, or (c) such a substance (other than the mere surface, which may be used for agricultural purposes) as possesses economic value for use in trade, manufacture, or ornamental arts; and it is demonstrated that such substance exists therein or thereon in such quantities as render the land more valuable for the purpose of removing and marketing the substance than for any other purpose, and the removing and marketing of which will yield a profit; or it is established that such substance exists in the lands in such quantities as would justify a prudent man in expending labor and capital in the effort to obtain it. (*Rules for determining mineral character of land*; *Lindley on Mines*, vol. 1, sec. 98.)

RAILROAD LANDS WITHIN FOREST RESERVES.

While the grant to the Northern Pacific Railroad Company under the act of July 2, 1864, was *in praesenti*, and took effect upon the sections granted when the road was definitely located, by relation as to the date of the grant, the survey of the land and the identification of the sections—whether odd or even—is reserved to the Government, and the equitable title of the railroad company and its assigns becomes a legal title only upon the identification of the granted sections. Until the identification of the sections by a Government survey the United States

retains a special interest in the timber growing in the township sufficient to recover the value of timber cut and removed therefrom.

In a suit brought by the United States for that purpose private surveys made by the railroad company can not be introduced as evidence to show that the land from which the timber was cut were odd sections within the grant and included in a conveyance from the railroad company to the defendants. (*United States v. Montana Lumber and Manufacturing Co.* 196 U. S., p. 573. Syllabus.)

RIGHTS OF WAY (CLASS II).

In accordance with the agreement made by and between the Department of the Interior and the Department of Agriculture, paragraph 2 of the circular of February 11, 1904 (32 L. D., 481), and paragraphs 3 and 66 of the circular of September 28, 1905 (34 L. D., 212), except the last clause in each relative to construction in advance of approval or specific permission, which will remain as at present, are hereby amended so as to read as follows:

Whenever a right of way is located upon a forest or timber-land reserve, the applicant must enter into such stipulation and execute such bond as the Secretary of Agriculture may require for the protection of such reserves.

This amendment applies to forest or timber-land reserves only, not to national parks. (Circular of General Land Office, April 25, 1906.)

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